

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1639.—Vol. XXXVII.

LONDON, SATURDAY, JANUARY 19, 1867.

(STAMPEDSIXPENCE.
(UNSTAMPED...FIVEPENCE.

Mining Exchange, London.

MINING EXCHANGE, LONDON.—As the rules of the Mining Exchange PROHIBIT all its MEMBERS from ADVERTISING SHARES at FIXED PRICES, the Committee feel it their duty to state that they have no means of offering redress to such of the public as may be misled by those advertising shares at fixed prices.
A List of the Members can be had on application to the Secretary.

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.

HOLDERS of mining shares DIFFICULT OF SALE in the OPEN MARKET may be purchasers for the same through Mr. CROFTS' agency. Also parties requiring ADVICE how to act in the DISPOSAL or ABANDONMENT of doubtful mining shares may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

ELY VALLEY COLLIERY.—Prospectuses, forms of application, and a plan of the property may be had of Mr. CROFTS.
Mr. CROFTS having devoted his attention to the position of a large number of mines which have recently emerged from almost total forgetfulness into favourable notice, refers to his remarks on p. 21, in last Journal, in reference to a selection he has made of such mines, of which the following is a list, and confidently recommends purchases without delay:—

Drake Walls.	Carn Camborne.	South Condurrow.
Cook's Kitchen.	Great Fortune.	St. Ives Consols.
Great South Toiglus.	Nangiles.	Wheal Kitty (St. Ag.)
Bedol-Aur.	Wheal Uny.	Wheal Kitty (Leland).
Stray Park.	North Downs.	Wheal Agar.
West Basset.	Pendean.	Wheal Emma.
East Providence.	Rosewall Hill & Rans.	North Dolcoath.
South Darren.	Rosewarne United.	

Holders of any of the above will suit their own convenience as to further purchases; but the writer believes that a more valuable list of speculative shares, most at nominal prices, has never been laid before the mining public.
Bankers: National Bank of Scotland, Finch-lane.

WILLIAM LANE (SUCCESSOR TO JAMES LANE),
44, THREADNEEDLE STREET, LONDON, E.C., STOCK AND SHAREDEALER (Established Thirty Years), has FOR SALE the following

30 Calbeck Fells, 16s.	20 Gt. No. Laxey, 27s 6d	100 Prince of Wales, 32s 3d
30 Chontales, 22 13s. 9d.	20 Gwydyr Park, 2s.	25 Rosewarne Utd., 15s.
30 Don Pedro, 21s. 9d.	5 Great Vor, 21s.	50 Redmoor, 5s. 3d.
30 Drake Walls, 17s 6d	100 Lady Bertha, 2s.	25 South Darren, 28s.
30 East Grenville, 22 3 9	10 Marke Valley, 24 12 6	50 South Grenville, 7s.
30 East Carn Brea, 23 3 9	50 Mineral Rights, 10s 6d	75 Wh. Grenville, 26s 3d
30 Frank Mills, 35s.	20 N. Treskerby, 22 16s.	20 Wheal Uny, 23s.
30 Gt. Retallack, 41s.	60 N. Birm. Tor, 10s.	5 West Chiverton.
30 Gt. No. Down, 23 3 9	25 Prosper Utd., 23 3 9	30 Wheal Crebor, 12s 6d
30 Great Laxey, 21 7 6	50 Pestarena Gold, 39s 6d	10 West Caradon, 21s 3 9
30 West Chiverton, Drake Walls, Calbeck Fells, and Great Laxey.		

SPECIAL BUSINESS in the shares of these mines, either as BUYER or SELLER, for cash or fortnightly settlement.
Clients and parties in the country wishing to dispose of shares will find this advertisement a ready means of doing so, by forwarding me a list of their holdings.
Approved references given to any part of the United Kingdom.
Bankers: London and County Bank.

MR. LELEAN, ENGLISH AND FOREIGN STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, LONDON, E.C.
Bankers: Roberts, Lubbock, and Co., Lombard-street.

GUIDE TO INVESTORS.—MR. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for January contains the state of a series of articles on the whole circle of Investments—British and Foreign Stocks and Loans, Bank and Finance, Railway and Insurance, Gas and Water, and Manufacturing and Commercial Shares; with such information as is necessary to guide intending investors amidst the shoals and quicksands of the multifarious species of investments that now present themselves.
Published by Pottle and Son, 14 and 15, Royal Exchange, London, E.C.

MR. WILLIAM SEWARD, STOCK AND SHAREDEALER,
19, THROGMORTON STREET, LONDON, E.C.

MESSRS. WILSON, WARD, AND CO., STOCK AND SHAREDEALERS,
16, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Can recommend two good mines for investment.

MR. THOMAS THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.
Mr. THOMPSON recommends the immediate purchase of Westminster, New Tamar, and New Clifford shares.

GEORGE RICE, SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C. (25 years' experience), Member of the Mining Exchange. DEALS IN MINING SHARES at close market prices of the day, as BUYER or SELLER, for cash or account.

Closing prices.	Closing prices.
Bryn Gwlog..... 21s - 21s	Great Fortune..... 4 1/2 - 5 1/2
Chiverton..... 8 1/2 - 8 1/2	Great Retallack..... 40s. - 42s.
Chiverton Moor..... 8 1/2 - 8 1/2	Marke Valley..... 4 1/2 - 4 1/2
East Basset..... 2 1/2 - 2 1/2	North Crofty..... 4 1/2 - 5
East Chiverton..... 2 1/2 - 2 1/2	North Treskerby..... 2 1/2 - 2 1/2
East Carn Brea..... 3 1/2 - 3 1/2	Prince of Wales..... 31s 6d - 32s 6d
East Lovell..... 3 1/2 - 3 1/2	West Caradon..... 12 1/2 - 13 1/2
East Russell..... 2 1/2 - 2 1/2	Wheal Grenville..... 25s. - 26s.
East Caradon..... 6 - 6 1/2	Wheal Crebor..... 10s. - 12s.
Great Vor..... 17 1/2 - 17 1/2	West Chiverton..... 58 - 60

M.B.—Some of the above shares must still further rise, as stated in my previous advertisements, whereas others should be sold at once, to secure a certain profit before the fall takes place.
Money advanced on mining shares.
Bankers: Bank of England.

CHONTALES AND ST. JOHN DEL REY GOLD MINES.—GEORGE RICE deals in these shares, as BUYER or SELLER, at all prices, and being in possession of important information as to the progress of the mines, can advise both speculators and shareholders when to buy or sell to their advantage.—Jan. 18, 1867.

CALDBECK FELS LEAD MINES.—GEORGE RICE strongly recommends a purchase in these great mines, before shares attain their old price.—Jan. 18, 1867.

MR. JAMES HUME, 74, OLD BROAD STREET,
TRANSACTS BUSINESS IN ALL DESCRIPTIONS OF MINE SHARES, net, at close prices.

SPECIAL BUSINESS in East Russell, East Lovell, Great Retallack, Great South Toiglus, Kitty St. Agnes, Prince of Wales, Redmoor, East Carn Brea, Carn Brea, Cook's Kitchen, North Crofty, Bottle Hill, South Condurrow, Chontales Gold, Pestarena Gold, &c.
Mr. T. HUME'S "Circular" forwarded on application.
Bankers: The London Joint Stock Bank.

WALTER TREGILLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., DEALS IN ALL KINDS OF BONA FIDE STOCKS AND SHARES, at close market prices:—
FOR SALE:—5 West Frances, 5 West Toiglus, 20 Chiverton Moor, 40 Camborne Vein, 100 New Clifford, 100 Don Pedro North del Rey, 100 Worthing, and 100 Frontino and Bolivia.
BUYER of 5 West Chiverton, 5 Trelawny, 20 North Treskerby, 10 East Caradon, 20 South Crofty, 100 Anglo-Brazilian, and 50 St. John del Rey.
Bankers: Alliance Bank.

MR. GEORGE BUDGE, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 19 years), has FOR SALE:—
—2 Minera, 214s; 1 Devon Great Consols, 2420; 1 West Sharp Tor, 210; 100 Pestarena Gold; 5 Maes-y-Safn, 220; 100 Don Pedro, 19s. 6d.; 200 Port Phillip; 100 New Crown Hill, 11s.; 50 Great Retallack, 22 1/2; 30 Mineral Rights, 3s. 3d.; 70 South Grenville, 8s.; 95 Dale, 2s. 1d.; 30 Crebor; 100 West Wheal Kitty; 150 Frontino and Bolivia; 50 Frank Mills; 100 Hollybush (paying 10 per cent.—good to buy), 23 9s. 6d.; 100 Hallenbeagle, 9s. 6d.; 50 United Mexican, 23.
Mr. BUDGE is a BUYER of 50 Wheal Kitty (St. Agnes), 23 1/2; 50 Gawton, 23; 100 East Rosewarne, 10s.; 250 Anglo-Brazilian, 6s. 6d.; 10 Cook's Kitchen, 210s.; 100 Redmoor; 100 South Caradon; 75 Prince of Wales; 5 Tincroft.

VALUATION OF LODES PER FATHOM.—PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of yesterday (Friday), Jan. 18, No. 407, Vol. IX., price 6d. each copy, forwarded on application, contains interesting particulars as to the valuation of Copper, Tin, and Lead Lodes. This "Circular" also contains a leading article on the Share Markets. Full particulars will be found respecting—

North Wheal Crofty.	East Carn Brea.	East Wheal Lovell.
Drake Walls.	Wheal Margaret.	Devon Great Consols.
Cook's Kitchen.	Clifford Amalgamated.	Providence.
Wheal Uny.	Wheal Chiverton.	Caldbeck Fells.
Grampian & St. Aubyn.	Prince of Wales.	Great Retallack.
North Roskear.	Great Wheal Vor.	East Pool.
Frank Mills.	Prosper United.	Chontales.
	West Chiverton.	

and other information respecting the purchase and sale of shares.
PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

STOCK AND SHAREDEALER.—MR. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD STREET, LONDON, E.C.
Railway, Joint-Stock Banks, Dock, Insurance, Canal, Mining, Steam-ship, &c., and every other description of shares bought and sold at net prices.
TELEGRAPHIC MESSAGES TO BUY or SELL Railway, Bank, Mine, and other shares and stocks, punctually attended to, at net prices for cash, or for fortnightly settlements, with advice as to purchases or sales.

Twenty-two years' experience.
(Two in Cornwall and Twenty in London.)
Bankers: The Alliance Bank, and the Union Bank of London.

From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, PETER WATSON is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality, and to the best advantage of his clients.

MR. EDWARD COOKE, STOCK AND SHAREDEALER,
76, OLD BROAD STREET, LONDON, E.C.
Has SPECIAL BUSINESS in Chontales, Prince of Wales, East Lovell, Frank Mills, South Darren, and West Caradon.

Is a BUYER of Prosper United at 23 1/2, and North Crofty at 24 1/2.
Shares either for cash or fortnightly settlements.
Stock Exchange securities dealt in at close market prices.
Satisfactory references given in any town in the United Kingdom.
Bankers: Alliance Bank.

MR. C. A. POWELL, SHAREDEALER, 78, OLD BROAD STREET, AND FOREIGN EXCHANGE, LONDON, E.C.
SPECIAL BUSINESS as BUYER or SELLER in West Chiverton, Chiverton, Chiverton Moor, Great Retallack, Prince of Wales, Chontales, Caldbeck Fells, and Frontino and Bolivia.
Parties having business in the above or other shares will be dealt with at net prices, at a fair margin on the market quotations.
Jan. 18, 1867. Bankers: Bank of England.

MESSRS. MCNEILL AND LONG, STOCK, SHARE, AND MINING DEALERS,
31, THREADNEEDLE STREET, LONDON, E.C.

JAMES D. GINN AND CO., STOCK AND SHAREDEALERS,
3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C.

JOHN RISLEY, 32, LOMBARD STREET, AND MINING EXCHANGE, LONDON, E.C., has SPECIAL BUSINESS in East Croft, Wheal Buller, and West Caradon shares.

MESSRS. WARD AND JACKMAN, STOCK AND SHAREDEALERS,
CUSHION COURT, OLD BROAD STREET, CITY, E.C.
Closing Prices, Friday Evening, January 18.

Buyers. Sellers.	Buyers. Sellers.	
Carn Brea..... 21s - 22s	Great Vor..... 17 1/2 - 18s	
Chiverton..... 8 1/2 - 8 1/2	Great South Toiglus..... 3s - 4s	
Chiverton Moor..... 8 1/2 - 8 1/2	North Roskear..... 2 1/2 - 3s	
Clifford..... 9 - 9 1/2	North Treskerby..... 2 1/2 - 3s	
Drake Walls..... 3 1/2 - 4s	North Crofty..... 2 1/2 - 3s	
East Basset..... 2 1/2 - 2 1/2	South Condurrow..... 14s. - 16s.	
East Grenville..... 2 - 2 1/2	South Frances..... 21 - 23s	
East Caradon..... 6 - 6 1/2	Prosper United..... 3 1/2 - 3 3/4	
East Lovell..... 10 1/2 - 10 1/2	Tincroft..... 14 1/2 - 15 1/2	
East Russell..... 2 1/2 - 2 1/2	West Chiverton..... 57 - 59	
East Caradon..... 6 - 6 1/2	West Caradon..... 12 1/2 - 13 1/2	
Great Retallack..... 39s. - 41s.	Wheal Buller..... 25 - 27 1/2	
Prince of Wales..... 31s 6d - 33s.	Wh. Kitty (St. Agnes)..... 3 1/2 - 4	
Wheal Uny..... 27 1/2 - 31 1/2		

There are many shares in the above list which should be sold at once to secure a certain profit, and no time should be lost.
Messrs. WARD and JACKMAN refer their friends to their remarks on p. 21.

WILLIAM MICHELL would still recommend the purchase of shares in which he has had recently inspected, the price of shares in which has not yet been influenced by market operations. There are others that he would recommend to be sold.
CHONTALES.—The mail has arrived, but no gold on account of the mine; the report is hopeful. Money advanced on Mining Shares.
Apply to 42, Cornhill, London, E.C.

MATTHEW GREENE, STOCK AND SHAREDEALER,
ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C., has BUSINESS in the FOLLOWING SHARES at the market price of the day, net and free of commission:—

20 Great Laxey.	25 Prosper United.	15 East Carn Brea.
100 Prince of Wales.	20 Great North Laxey.	100 New Tamar.
50 North Crofty.	100 East Snafell.	150 New Clifford.
5 East Basset.	10 East Caradon.	20 Westminster.

MATTHEW GREENE is always prepared to deal in Stock Exchange securities at close net prices.
Bankers: Imperial Bank.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 12 years), has FOR SALE the FOLLOWING SHARES, at net prices:—
50 Prince of Wales, 32s 9
30 North Crofty, 24 19s.
15 Marke Valley, 24 11 3
2 New Seton, 23 1/2
25 Okef Tor, 21 13s. 9d.
5 Wheal Rose, 23 1/2
15 E. Carn Brea, 23 6 3
10 East Lovell, 210 8s 9d
20 Gt. No. Down, 23 3 9
50 Chontales, 6s. 5d. 41s.
40 Wl. Grenville, 27s 6d
50 Mineral Rights, 9s 9d
1 Wheal Seton, 13 1/4
20 Bottle Hill, 5s.
25 No. Dolcoath, 4s. 3d.
4 W. Chiverton, 25 1/2
50 Gt. Retallack, 40s. 9d.
4 Carn Brea, 21 1/2
15 East Russell, 22 13s.
5 West Caradon, 21 1/2
5 Clifford, 29 6s. 3d.
20 Chiverton Moor, 25 1/2
30 Wheal Uny, 23 3s. 3d.
40 Lady Bertha, 1s. 6d.
50 Hallenbeagle, 9s. 9d.
20 E. Rosewarne, 14s. 9d
20 Wheal Agar, 27s. 6d.
20 East Bottle Hill, 5s.
25 South Frances, 22 1/2
10 Chiverton, 28 1/2
45 Providence, 22 1/2
45 Drake Walls, 18s. 3d.
25 Gt. No. Laxey, 28s 9d
30 S. Condurrow, 17s. 6d
25 N. Treskerby, 22 1/2
5 Gt. Wh. Vor, 21 1/2
20 Rosewall Hill, 34s. 6d
10 East Caradon, 26 1/2
100 Frontino, 5s. 9d.
25 G. So. Toiglus, 16s. 9d.
40 Prosper Utd., 23 13 9
50 Caldbeck Fells, 14s 6d
9 Grampian, 25 1/2
40 Crebor, 11s.

MR. R. EMERSON, 28, GREAT WINCHESTER STREET, LONDON, E.C., has the FOLLOWING SHARES FOR SALE at net prices:—50 East Bottle Hill, 5s.; 30 North Dolcoath, 4s.; 10 Westminster Lead, 25; 25 Sortridge Consols, 3s.; 75 Drake Walls, 20s.; 20 South Condurrow, 15s.; 50 Wheal Crebor, 14s.; 20 Leeds and St. Aubyn, 25; 95 Dale, 1s. 6d.; 20 West Wheal Kitty, 5s.; 10 Great South Toiglus, 20s.; 100 Abraham Consols, 10s.
And a BUYER of Clifford Amalgamated, West Frances, North Roskear, and West St. Ives.
Advice given on the sale and purchase of shares.
Eighteen years' experience in Cornwall and thirteen in London.

INVESTMENT, LOAN, AND BANK AGENCY.
Established 1839.
BANKERS—London and County Bank.

This Agency undertakes the Investment of Capital in British and Foreign Government Stocks and Joint-stock Companies upon advantageous terms. Every information afforded to Capitalists, Trustees, and others, who seek investments of a strictly safe and eligible character.
Loans granted on Stocks and Shares having a market value, interest allowed upon deposits, and every description of Bank and Money Agency business transacted.
CHARLES PETERS, Sec.
No. 12, Clement's-lane, Lombard-street, London, E.C.

M. R. CHARLES THOMAS,
MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER,
3, GREAT ST. HELEN'S, LONDON, E.C.

SALE OF MINING SHARES BY PUBLIC AUCTION.

MR. CHARLES THOMAS'S NEXT SALE of MINING PROPERTY and SHARES will be HELD at the London Tavern, on THURSDAY, the 7th day of February, 1867, at One o'clock precisely.
Persons desirous of offering shares on that day should give notice of same immediately, in order that their property may be advertised in the country papers. No orders received later than Saturday, 2d of February.
Address, 3, Great St. Helen's, Bishopsgate-street, London, E.C.

NORTH POOL MINE.—MR. CHARLES THOMAS has a NUMBER OF SHARES FOR SALE, for which no reasonable offer will be refused.—3, Great St. Helen's, London, E.C.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, UNION CHAMBERS, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Mr. THOMAS has SPECIAL BUSINESS in Bottle Hill and East Bottle Hill, West Kitty, North Wheal Crofty, and North Roskear.

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE LONDON, E.C. (Members of the Mining Exchange), STOCK AND SHAREDEALERS, AND FINANCIAL AGENTS, transact business in all kinds of securities at closest net prices for cash or account.
Parties of respectability can have transfers registered in their names previous to payment.
Daily price list on application.
Bankers: London and County Bank.

SAFE INVESTMENTS FOR CAPITAL.
Paying 5 to 20 per cent. per annum upon the outlay.
SHAREHOLDERS, CAPITALISTS, TRUSTEES, and INVESTORS seeking valuable and reliable information, and requiring safe, sound, and profitable investments, should at all times consult
SHARP'S GENERAL INVESTMENT CIRCULAR
(Post free).
It is a safe guide, giving every information to shareholders and capitalists.
GRANVILLE SHARP, STOCK & SHAREDEALER, 32, POULTNEY, LONDON.

MR. J. B. REYNOLDS, 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C., has SPECIAL BUSINESS in—

North Crofty.	Wheal Chiverton.	Wheal Crebor.
Prince of Wales.	Chontales Gold.	Dale (Limited).
North Roskear.	Frontino Gold.	Marke Valley.
South Callington.	Gothic.	Great Retallack.
West Wheal Kitty.	Cuddra.	North Dolcoath.

Mr. REYNOLDS never recollects a period so promising as the present for a quick rise in the price of good bona fide mining undertakings. His first Circular for 1867, now in course of preparation, will contain some startling facts relative to the past, present, and future prospects of this branch of industry.
Established Ten Years. Member of the Mining Exchange.
Bankers: City Bank.

MR. J. B. REYNOLDS'S OFFICES, 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.

Business transacted in British and Foreign Stocks, Railway, Bank, Insurance, Financial, or Mining Companies Shares, and all Miscellaneous Securities, at the lowest market quotations.
Exchanges effected and purchasers found for shares not generally marketable.
Mr. REYNOLDS is a BUYER of any number of West Wheal Kitty shares. Sellers please state number and lowest price.
Telegrams promptly attended to. Established Ten Years.
Bankers: City Bank.

MR. WILLIAM WARD, STOCK AND SHAREDEALER,
No. 29, THREADNEEDLE STREET, LONDON, E.C.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, has BUSINESS in the FOLLOWING SHARES, either as BUYER or SELLER, at close market prices:—

Bedford United.	Chontales.	Great Retallack.
Drake Walls.	Crebor.	Great Laxey.
Great South Toiglus.	Chiverton.	Great North Laxey.
North Roskear.	Clifford.	Great Vor.
Stray Park.	East Lovell.	Marke Valley.
Caldbeck Fells.	East Grenville.	Herodsfoot.
North Crofty.	East Caradon.	Prosper United.
Prince of Wales.	North Treskerby.	West Chiverton.
West Caradon.	Grenville.	East Carn Brea.
East Russell.	Wheal Buller.	Great North Downs.
Okel Tor.	Wheal Uny.	Gawton.
Devon Consols.	West Sharp Tor.	Tincroft.
Wheal Seton.	East Rosewarne.	Wheal Edward.
Wheal Agar.	East Gunnislake.	

AN OFFER WANTED for Lady Bertha, Old Gunnislake, Dale, West Maria and Fortescue, Gwydyr Park.

Parties desirous of investing in mining should consult T. ROSEWARNE, as there is a great deal of money to be made in several of the above mines.
Money advanced on mining shares.
Bankers: Bank of England and Consolidated.

MR. G. D. SANDY, STOCK AND SHAREDEALER,
No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS in EVERY DESCRIPTION of STOCK EXCHANGE SECURITIES, MINING and FINANCIAL ENTERPRISES, at close market prices.

Mr. G. D. SANDY recommends the immediate purchase of New Tamar, and Lovell Consols, as a rapid advance in price is certain to take place early in the ensuing year.
Mr. G. D. SANDY'S Circular for the present month, now ready, should be perused by all interested in mining enterprise. Gratis, post free.
Correct Daily Price List may be had on application.
Money advanced to any amount on legitimate stocks and shares.
References exchanged.

BARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS, 2, BUCKLESBURY, LONDON, E.C.

Business transacted in every description of stocks and shares at lowest market prices, free of commission.
All communications will receive immediate attention, either personally or by letter.
N.B.—LOVELL CONSOLS TIS having advanced, intending investors should not delay purchasing at present low prices, 23 to 23 1/2.
WEST MARIA AND FORTESCUE.—AN OFFER WANTED for 25 shares.
Bankers: London and Westminster.

MR. EDWARD BREWIS is a BUYER or SELLER for cash or account, or for dealings end of April, July, or September, 1867, in the undermentioned mines:—

Chiverton.	Chiverton Moor.	West Chiverton.
Westminster.	South Condurrow.	Prince of Wales.
Clifford.	Caldbeck Fells.	Great Vor.
Grenville.	North Crofty.	Dyngwyn.
Prosper United.	Wheal Buller.	West Caradon.
Chontales Gold.	Frontino and Bolivia.	Don Pedro No. del Rey.

Will sell 100 Wheal Chiverton in exchange for 1200 South Condurrow, delivery any time in 1867.
No. 8, Warrford-court, Bank, E.C., London.

MR. JOHN LITTLE, STOCK AND SHAREDEALER,
77, OLD BROAD STREET, LONDON, E.C. (late of Redruth).
Immediate attention to orders by telegraph or letter.
Prompt cash settlements.

JOSEPH J. REYNOLDS, Jun., UNION COURT, UNION CHAMBERS, OLD BROAD STREET, LONDON, E.C.
See letter on p. 37, for information on North Crofty and North Dolcoath, and full report in the Journal of Jan. 5.

MR. JOHN HOSKING, MINING ENGINEER,
(Late of Ashburton, Devon).
Mr. HOSKING, having had 20 years' practical experience, OFFERS HIS SERVICES as MINE SURVEYOR, VALUER of MINING MACHINERY, or to INSPECT any MINING PROPERTY, either at home or abroad. Terms on application.—14, Liverpool-street, London, E.C.

Original Correspondence.

COMPENSATION FUND FOR ACCIDENTS IN COAL MINES.

SIR,—The recent deplorable accidents which have occurred at Barnsley and North Staffordshire have directed general attention to the subject of a compensation fund for the relief of sufferers by mining casualties. A correspondent of the *Barnsley Chronicle* makes some very valuable suggestions in reference to this matter. He states that in the ten years ending 1860, 9090 lives of miners were lost in collieries. During these ten years 605,154,940 tons of coal were raised, so that one person was killed for each 66,573 tons of coal raised from the pits; 909 were killed annually, according to the average. Sometimes nearly one-fourth of the year, by average of 909 deaths, is supplied at once by one pit, under circumstances of almost unparalleled horror, as was the case, for instance, in the Hartley accident, the dramatic incidents of which wrung the heart of England, and produced a great flow of subscriptions for the widows and children of those who perished. But it has been proved that such benevolence is not applicable to relieve the current and continuous stream of accidents happening throughout each year, and that it is only where the victims are very numerous, and their deaths are accompanied by some thrilling dramatic incidents, that an adequate provision can be obtained from such a source. A less discriminating and uneven system of relief than that afforded by charitable contributions would, therefore, seem to be desirable. It is suggested, then, that the owners of each pit should be rated at a certain amount, to be paid into a common fund, based upon the annual average for the last five years of accidents in coal mines throughout each portion of the United Kingdom, and that out of this fund allowances should be made to the widows and orphans of those who are killed by the unavoidable accidents in their calling. The establishment of such a fund might be made to exercise beneficial results, both upon the men and the coalowners. The details of management might be arranged in each district by a general committee.

Such are the main points brought forward by the writer alluded to, and I think it will be admitted that the above suggestions are entitled to careful consideration. In an appendix to his letter, since published, we find the following statement:—"There are in the United Kingdom 3268 collieries, in which are employed 307,542 coal miners, who produced in 1865 by their labours 98,150,587 tons of coal, which is valued at the pit's mouth at 24,537,646*l.* Supposing, then, that a sum of 43,220*l.* were yearly raised for a compensation fund, an average of only 15*l.* per pit would provide the money."

The suggestions which I would make in connection with the above relate more particularly to the manner of raising the required compensation fund. I think that in any such scheme as this the men themselves should be made to take an active personal interest, and should also contribute their fair share of money, in order to be entitled to relief for their families in case of accident. Making only rough calculations, it seems that a contribution of one-eighth of a penny per ton of coal raised (say, on 100,000,000 tons per annum), would realise 52,000*l.* per year. Also, a contribution of one penny per week per man would raise a total of 65,000*l.* per annum. Now, assuming that it would be equitable to divide the expense of the compensation fund equally between the coalowners and the workmen, it is evident that a contribution of one-sixteenth of a penny per ton of coal raised, and of one halfpenny per week per collier, would raise an annual sum of above 58,000*l.*, or, allowing for contingencies, expense of collecting, &c., say, of 55,000*l.* a year, which would be sufficient to allow a more liberal provision for survivors than was adopted even in the Hartley case. The great advantage of a scheme of this kind would be, that it would meet the case of isolated accidents, where the relative amount of suffering is about the same as in the more deplorable catastrophes. The present seems a most favourable time for discussing and considering the above matter, the more so as I understand the subject is to be brought forward at the approaching meeting of the Mining Association of Great Britain.

No doubt some notice will be taken of the recent colliery accidents in the ensuing parliamentary session, and, therefore, I would urge the consideration of the points above alluded to upon the attention of those members of the House who are locally connected with colliery districts.—*Middlesex, Jan. 17.* W. R. J. HOPKINS.

IMPROVEMENTS IN COAL MINING—No. V.

SIR,—I will now pass on and briefly consider UNDERGROUND TRANSPORT. This part of underground work has improved wonderfully. Twenty years ago, and it is to be regretted even now, many collieries had such miserably low contracted roads that people who travelled on them had to do a great deal of that (as the colliery phrase is) "on all fours," or on their hands and knees, and very little boys had to be employed to convey the coals from the place where they were dug to the shaft. The mode of conveyance was something like the following:—"The tub," or "corve," in which the coal was conveyed was generally a box-like thing, of various shapes and dimensions, but mostly a little oblong-shaped, with two shoes or slides on the bottom, not unlike the "sledges" used in the Arctic regions, capable of holding variously from 1½ to 2½ cwt. of coal. The power applied to drag these box-like "corves" was, as has been said, boys—as a rule, two of them to one tub or corve. Each boy had a kind of gearing to fit his body, made of different kinds of material, and in different parts of the country of various shapes. The most common one was a leathern strap, about 1½ in. or 2 in. wide, of sufficient length so that when the two ends were stretched together in the form of a belt or ring it would slip over the head and shoulders down to the spine or narrow part of the back. Before the two ends were sewn together, an iron ring or hook, made to fit on the strap belt, was put on. In addition to this, each boy had a loose piece of chain, varying in length from 8 to 27 in., at one end of which was a hook. The other end was fastened to the hook on the belt, and the "corve," or "tub," was attached to the hook end of the chain. The boy, if sufficiently strong, threw one leg over the chain, and to apply his power to drag the tub behind him assumed the position of a quadruped, going on "all-fours." If not sufficiently strong, he went "back first," or travelled backwards, pulling the load 8 in. or 10 inches at a time, not being able to maintain the motion of the tub and move his legs at the same time—which simply means that, with his feet upon the ground or floor, and his hands against the wall or side, forming, as it were, a sort of fulcrum, while with the belt round his waist he jerked the load 8 or 10 in. The load has to stand while the feet and hands are again planted, then another jerk of the same distance. This operation was repeated at least every foot of the road, and some of them were by no means short. I have known lads worked this way until they have (for a time) fallen powerless along the ground, and wept bitterly; and I now wonder that such means should ever have been used, for, as I have seen it, it was too much for any boy or man either. It was really very hard work. I have heard it said, and I believe there is some truth in it, that the reason so many of the colliers are crooked legged, or, as they say, "bow-legged," is owing to the mode of dragging that I have just described, back first; for there is great strain put upon the legs, and I doubt not many have become bow-legged from this very cause.

By the introduction of iron rails laid, like our railways, on the surface, and wheels on the tubs, a great deal of the work described above is dispensed with. The rails are laid up to the face of the coal, so that, if there were no mechanical or horse-power, a boy is able to do as much work again—or, rather, the expense of work by the boy produces much more than twice the result; but by horses and machinery very little of this work has to be done by physical labour. I have known places where a boy some 16 years of age has had a hard day's work in conveying 36 cwt. in a day. By good arrangement a pony and boy will convey more than 36 tons per diem. Then, again, take "tail ropes" and "endless chains." What an amount of coal can be conveyed by either of these systems! There is some diversity of opinion as to which of these two systems is the best. That of which they know most is the best in some individuals' opinion. Each has its advantages and disadvantages. Apart from the different systems, I think, as to work, the endless chain has the advantage, inasmuch as the chain never stops during working hours; all its appliances being self-acting there requires no alteration in the motion. The full and empty tubs are put under and delivered as constantly as the sheets of paper are put under the cylindrical press at one end

and delivered at the other. The advantage of the endless chain is that it keeps those attending it at their duty, and, as a consequence, improves them very much, as is the case with all machinery. Under this head I might speak of the different sorts of tubs or trams, for without a travelling experience a person would scarcely credit the diversity of form and capacity there are in different parts of the mining country. In Lancashire, where for mining machinery they stand first, in tubs and corves they are behind. The square tub, as generally adopted, is a very unwieldy conveyance, and not at all in keeping with the nature of the work. Yorkshire, also, would not carry away the palm for its construction of corves. Indeed, in most districts this seems to be a subject to which there is little attention paid, yet it is a very important point in the economy of an extensive colliery.

Wheels, and their position.—I have seen many places and concerns, of some pretensions, too, put the wheels nearer the centre than the ends of the tubs, and allege as their reason for so doing that the corves are much easier to tip over and to lift on the rails when off—a very plausible reason, too, but they overlook the fact that the very provisions they make cause additional work in other directions. The main object ought to be to keep the corves on the rails, then they will not require lifting on. Let the best provision be made for this, and the tipping can have stationary facilities. I have not seen any papers or discussions on this subject, although it is of so much importance. The roads also come under this head. This has received some attention. In many districts I have seen main wagon-roads or levels, where the coal of the whole pit has come through so narrow and so low a hovel, that a boy even could not pass a tram in the way, if he should happen to meet any between the offsets. I have seen instances, where boys did the wagoning, of their having to go back on the road through a slit in the face of the coal, come down another slit, and go on the main road, to get to the other side of their tram, when there has been some impediment in the way of its progress, which amounts to this—in order to get to the fore end of his tram from the back, he has had to travel 80 or 100 yards to do it, when the distance from the back to the fore end of his tram was 4 feet, if the road had been wide enough for him to have gone between his tram and the side or wall of the road, or if there had been height enough to get over the top, thus performing a needless journey of that distance, and consuming time to the amount of some four or six minutes. Then there is the height of the road. It is a piece of downright folly to have any road coal has to be conveyed upon low—i.e., of not sufficient height. How often even now-a-days does one hear the men engaged in loading or filling coal complain that they cannot fill the tubs any higher, they will not go under the roof. I remember, about some four years ago, going to do some surveying at a colliery, and being very much retarded by one of the main roads being so very low; it was a long one too. Imagine the evil of their using a trolley and small slid tubs, the trolley and tubs standing about 2 feet 3 inches on this road; they thus brought the coal to a place near the shaft, where they emptied the small tubs, and filled the coal in proper 10-cwt. trams. When we reached the coal there was a splendid face of good unmixed coal, full 4 feet 9 inches, with a top or roof of 3 feet heavy ground, and above this good strong clay shale, of some 25 fathoms thick. I need scarcely say that such a colliery, or rather, such a worked colliery, did not pay very large dividends. It is to be regretted that many collieries at the present day are very much crippled in this respect. It is false policy to have bad roads. I but recently visited a colliery where the underground haulage or conveyance (and none of it has to be drawn up hill) cost as much per ton as the conveyance of coal from Clay Cross to London—a distance of nearly 200 miles. During the same week I saw a colliery with much more road open, and working with a sixth of the coal drawn up hill, at a cost of only one-fifth of that mentioned above, and the roof in the former case is much better than the latter for making good roads. A good deal might also be said about rails, shunts, &c., as these are much neglected. It seems almost a prevalent idea that anything will do for underground use, any sort of timber for sleepers, any kind of connections for the rails. It is a great mistake. I see no reason why there should not be as much care and attention in laying and keeping in order a main road underground as there is on our system of railways, even to "fishing" the joints. To the weight of rails there seems little attention paid. I remember changing the rails in a colliery (I am not speaking of the flange-rail, but the bridge or T-rail) from a 12 lbs. to a 27 lbs. in a main road, and with nothing else, the ponies actually brought double the number of trams with equal ease. There is much in the proximity of the sleepers to each other. Water on the main roads used to be a common plague, now very few roads indeed used for the transit of coal have any water at all on them; instead of this, many of them are obliged to have water taken and sprinkled to lay the dust, like the water-carts in our cities. What a vast improvement in the right direction. I will leave this, imperfect as I know it is, and just review ventilation.

Ventilation.—I suppose from its importance, has received more attention than any other subject connected with mining operations, but the people (even officials) who understand the subject are few compared with those who do not. There are some dreadfully ill-ventilated collieries in districts where only small collieries are situated; and previous to the Inspection Acts, as a rule, ventilation was never even thought of, much less provided for, so long as the miners could get into their places of work. If driven back, either by carbonic acid or hydrogen gas, an attempt was made to get rid of it, and nothing more, and none but those who have had experience can imagine the extent of negligence in this department. When "sulphur," as hydrogen gas was and is called, happened to be in a place, a man would have begun "batting" it out—i.e., trying to dilute it, by taking his coat or some garment, first putting out his light, and fanning, as it were, in the place, by which the gas would be more diffused. After batting half-an-hour or so, he would put his light on the floor as near as he could bring it without igniting the gas, and begin working with his light sometimes twenty yards behind him. This may seem too risky to be true; but if as many working miners were to read this statement as lookers-on, they could testify to the correctness of it. Black-damp was never cared for. Many living can now tell the story of having worked for weeks together where a light would not burn. Many hundreds of yards of strait or narrow work have been driven entirely in the dark; many thousands of tons of coal have been got by men in wide work, where it has required either a man or boy to keep a light burning—as many as six candles stuck together. I have known collieries where boys were specially employed to keep lights for the men, and they have had plenty to do—turning the candles to all angles, spreading and opening the wicks, and not daring to breathe in the direction of the light lest it should go out. What a contrast to the well-ventilated collieries of the present day! There are some very crude notions yet about ventilation. I give the following as an instance. Not long ago, at a certain colliery, where the return air-way was all but impassable, the area for more than 400 yards long being from 3 feet to 4 feet 6 in. (to be plain, the writer had then to work the concern), I ordered the air-course to be made larger, and on one occasion, while going through (a two hours' job), I happened to say to the deputy—"How do you come to have so many turns and bends in the road?" His reply was this—"To make the ventilation better." This was a new idea to me, and, of course, I had to get at the reasons, fearing my preconceived notions of ventilation might be wrong, especially as so small an area with these ideas of angles and turns "making the air better," seemed enough for them. I was naturally anxious to get at the secret. The man frankly gave me his reasons, which were to this effect. He said—"Do not you feel just when you come to one of these turns that the wind is a good deal sharper?" Of course, I did feel that the wind was sharper at the corners; this was a proof to them that the turns made the air better. After this explanation I could at once see through it, and got into the secret of their idea. It was simply, that the wind having a certain velocity, however small that may be, if it came in contact with some obstruction, so as to divert its course, it will fly off from that obstruction at a tangent, or the angle of which with the obstruction will vary according to the velocity. It appears they felt from this reflection more or more sensible pressure, and came to the conclusion that it helped the ventilation very much; and so thoroughly convinced were they of this, that the deputy assured me that the more turns there were in a wind-way the better it was for the ventilation.

Your readers will, probably, say anybody might see that the gles and turns were real obstructions, and very much retarded air in its course, but I can assure them there are at the present hundreds of our collieries, with the underground management in the hands of people entertaining such ideas, and who have not the idea why and how a current of air is maintained. It is a fact, ever, much to be regretted, how ever serious the consequences may be, that the majority of underground stewards and deputies are selected not for the knowledge, either scientific or practical, they possess because they are good physical workmen, and have earned the money. Now, this qualification speaks well for their sobriety of attention to work, but it has no other recommendation. I have many good working machines covered with men's garments, working men are the right class to select the stewards and deputies, but their position involves such responsibility that great should be exercised in their appointment. I have seen some of men most unfit for such capacities, and the only reason a master assigns for his giving him the situation was—"Well, the man did well for himself, and we think he will do well for us." If in "well" he could have included improvement of mind, and an attainment of knowledge suitable for such a capacity, it would, indeed, "well;" and such a man, above any other, however educated, is man for the position; but when the "well" means money only is nothing but an indication of the master's leading feature in concern—money at any price. I have made a digression from subject, but was unwarily drawn into it, and must beg the indulgence of your readers.

To describe the carelessness of ventilation in a great number of places 20 years ago would startle the present generation of miners and young men who have been privileged in being brought up in improving mining districts of the present day. I am happy to see a great improvement in ventilation, as compared with bygone days, and hope the very necessary knowledge of the laws of ventilation become more and more known. A COLLIERY VIEWER.

EXPLOSIONS IN THE OAKS AND TALKE COLLIERIES.

SIR,—The terrible accidents that have recently occurred at Oaks and Talke Collieries, and the frequent occurrence of explosions in other coal mines, are enough to induce the public to believe that to be inevitable. Such, however, is not the case. The resources of practical science are generally sufficient for their prevention, and were they resorted to and efficiently enforced, explosions would not and could not happen.

The occurrence of an explosion is of itself a positive proof of well-known precautionary measures have been culpably and grossly neglected. Twenty years ago it was as notorious as it is now that these dreadful accidents might be prevented, and were not, a state of things naturally excited great public sympathy towards the bereaved wives and orphans of the sufferers, and there was irresistible demand for an official Government supervision to enforce a strict observance of the needful means for the prevention of accidents. The passing of the Act for the inspection of coal mines enacted throughout the United Kingdom as a certain remedy for a great evil in the future.

However reasonable these hopes may have been, experience has lamentably proved that they were fallacious. Not that the means for preventing explosions were insufficient, but that they were regarded, notwithstanding that a number of well-paid Government inspectors were appointed sixteen years since for the express purpose of compelling a strict observance of all preventive measures.

As an illustration of the working of this Act of Parliament, I do not do better than refer to the evidence which has been given on the Coroner's inquest, now sitting, to ascertain the cause of what has been justly termed "the greatest colliery accident ever known." And may, perhaps, be permitted to observe that it is a shame and national disgrace that such a wholesale destruction of human life should occur in a country which boasts of its high civilisation and advanced scientific knowledge. So far as the evidence has gone, has distinctly and unequivocally proved that the Oaks was a very fine colliery. That it has been so ever since 1853, and remained in the dangerous condition up to the moment of the explosion. Nor was this all. As if the elements of destruction were insufficient, another was added to those already existing by collecting the abundant gas in damp into gasometers placed in the underground works, and lighting 800 yards of the level headings with the gas thus obtained and served. Some faint glimmering of the obvious danger thus precipitated appears to have recently dawned on the minds of the authorities, and the distance so lighted was reduced to 400 yards.

Now, the only preservative in such a mine from a calamitous accident was a thorough and skilful ventilation. This was an imperative and an absolute necessity. Without it death to most or all the persons in the mine was as certain as that two and two make four. The explosion could not have occurred had the mine been properly ventilated, and that it was possible so to ventilate it no one that is thoroughly conversant with the subject will venture to gainsay. The evidence of several of the witnesses is unequivocal on the question, and, indeed, it is impossible to read the depositions without coming to the inevitable conclusion that the mine was imperfect and insufficiently ventilated.

As is usual in such cases, great pains have been taken to prove that the explosions were attributable to the carelessness of the men. It has been said, as regards the Talke Pit, that a great many lamp-keys have been found on the persons of the unfortunate dead, and it has been more than hinted that the explosion was caused by their having moved the wire-gauze from their lamps. Now, if the atmosphere of the mine were in an explosive condition, it was in an unfit state for men to work in, and was so in direct contravention of the first General Rule in the Inspection Act; and, further, the fact of the men having removed the gauze from the lamps proves that they were desirous to obtain more light than could be derived by the air passing through the wire-gauze in a foul atmosphere.

It is doubtless satisfactory to know how an explosion occurred, but this is only a secondary consideration. The first, and by far the most important, fact to be ascertained is whether the ventilation of the mine was such as to comply with the requirements of the law, and to ensure the safety of the men.

So long as coroner's juries allow their attention to be diverted from the main question, and directed to less important subjects, all hopes of increased safety to life in our collieries must end in disappointment. There can be no doubt that if the present law had been properly administered very different results would have been ensued.

That collieries so dangerously infested with fire-damp, and so lamentably deficient in ventilation, should have been permitted by Her Majesty's Inspector of Mines to be carried on, contrary to the express prohibition of the law, appears inexplicable. If such are to be the results of the Inspection Acts, one is compelled to come to the conclusion that we should have been better without them, for by inspiring the poor colliers with a false confidence they but lure them to their destruction. A fearful responsibility for the past destruction of life rests somewhere, and it is high time that responsibility should be something more than merely an honourable appendage to an official name. R. J. N.

COLLIERY EXPLOSIONS.

SIR,—Will you kindly oblige me by inserting the enclosed letter in your valuable Journal, and also the following remarks thereon:—

SIR,—The world is every now and then startled and horrified by seeing in the papers an announcement—"Terrible Colliery Explosion." Now, after every explosion the public feels that something ought to be done to prevent or lessen them, yet they continue to happen, with the exception that they are generally more extensive and disastrous. I believe in the story of the shot in the stout drift at the Oaks Colliery has lost ground from the evidence given at the inquest. But we learn that the seam which is worked at the Oaks Colliery is liable to sudden outbursts of gas at a great pressure from the thill or floor of the seam, also the roof being so strong as to stand for a considerable extent after the coal is worked; thus forming a lodgement for a large body of gas, which only requires a heavy fall or collapse of the roof to force it out in an unbroken body on the collier's lamps, or, still worse, on to the naked gaslights on the roads. Now, had the Oaks Colliery been divided out into districts or panels, with a barrier of coal between them, and each containing its own complement of men, the probability is that the explosion would be confined locally, and the loss of life reduced. The suggestion to work collieries by this system was given in the evidence of the eminent viewer, Mr. John Buddle, before the Committee of the House of Commons, 1846. An example of the benefit of the panel system of working was given by Mr. Buddle in his evidence (Report of the Committee on Accidents in Mines,

July 2, 1855; 2293 to 2296). An explosion of gas occurred many years ago at the Waltham Colliery, where his "dam door" and panel were in operation. The dam doors are fixed in the openings to these districts in strong frames of timber, and made of 3-in. or 4-in. planks, bolted together as firmly as possible; they are suspended by hinges from the roof, having a stanchion to keep them up. The explosion at this colliery, Mr. Pelle, on going into the district or panel, discovered that the explosion had set fire to the coal. There was no water to be had, and there was great danger in approaching the coal. The "dam doors" were let down and secured, thus keeping the ventilation off the coal which was on fire. This was allowed to remain some time, when, on opening the "doors" again, and restoring the ventilation so as to be able to explore the district, the fire was found to be extinguished.—THOMAS GRAY: *Taibach, Glamorgan, South Wales.*

Referring to the above letter of Mr. Gray, who, I presume, is the manager, or the under manager, of the Morfa Colliery, South Wales, in which an explosion occurred a few years ago, resulting in the death of a large number of men. If I understand Mr. Gray's letter, he advocates the workings of each pit being divided into districts or panels, and that no naked lights be exposed in any of the roads leading to the workings. Will Mr. Gray inform me, through the Journal, if such a principle of working was in operation at the time of the explosion, or is now adopted, at the Morfa Colliery? Also, if the use of naked lights, and the re-lighting of safety-lamps, are prohibited in all parts of the mine? If Mr. Gray can answer the foregoing in the affirmative, the public and myself will have faith in his recommendations, and give him credit for the best intentions; but if not, we shall be inclined to think his letter was written for no other purpose than seeing himself in print.

Jan. 15. A COLLIERY MANAGER.

NITRO-GLYCERINE.

SIR,—Some time since I drew the attention of your readers to the danger attending the incautious use of Nitro-Glycerine. One of my remarks, that "it exploded by a slight concussion," was at the time fully contradicted; but in confirmation of my view, I beg to enclose you a paragraph from the *Lancet* of Saturday last, and as the facts there stated may, if well known, be the means of preventing accidents, possibly of saving life, you will, doubtless, think the matter of sufficient public interest to warrant its insertion.

B. T. J.

The experience of explosions from the use of nitro-glycerine urged our Government to pass the Act of last session, "On the carriage of dangerous goods," the penalties for an infringement of which will, it is hoped, check the trade in this dangerous compound. In America no one is allowed to ship or carry nitro-glycerine with passengers under a penalty of \$5000; and should death result from a violation of the law, the offender is to be indicted for murder. Mr. Kopp, from recent experiments made with great care, concludes that the transport of the oil should be altogether prohibited, and, if wanted, made on the spot. He also found, amongst other features, that at a low temperature—and this will specially apply to seasons like the present—the crystalline in long needles, and in this condition will explode from a blow. Consequently, under the influence of much cold, it forms a solid mass of the most dangerous nature. The same observer ascribes the cause of the recent accidents to the impurity of the nitro-glycerine, which, when acid, decomposes most readily, giving off gas and producing oxalic and glyceric acids. When tightly corked in bottles or other vessels, the gas collects and exerts great pressure on the nitro-glycerine, which is then ready to explode by the slightest shock or movement. Various plans have been suggested by which this tendency may be diminished or annihilated; but the only one that really seems calculated to lessen the amount of accidents is the preparation of a very pure compound which shall not decompose. It would seem from these facts most advisable that the traffic in nitro-glycerine should be entirely stopped.

MINING IN IRELAND.—No. V.

SIR,—Before entering on the subjects of Slates, Building Stones, and Clays, it will be well to mention a few more substances procured in the development of lodes, and which constitute mines proper—by this term I mean such as require shafts and tunnelling for their production. These ores are generally found at or near the surface, and are not unfrequently made useful as ochres for colourmen and paper-makers. These gossans are procured at the surface, and are oxides of iron; the action of the atmosphere decomposing the ferruginous ore. In some instances these formations are so extensive as to form an important adjunct. In certain situations, such as where water for washing to render the article fine, and where carriage to port for shipment is cheap, a very considerable profit may be realised. The raising and washing can be performed by unskilled labour, at an easy cost—in fact, the whole manipulation of the article is inexpensive, and where it can be rendered cheap a great demand exists, in England, France, and other countries. Since the almost universal introduction of painted floorcloths, the quantities of ochre consumed are enormous in comparison with what had previously been. Now, I am not aware of any ochre works being established in this country, though I know of places where thousands of tons may be procured, under a combination of the advantages above enumerated. The whole of the gossans of a true copper lode abound in a very richly coloured ochreous clay, admirably adapted to the painter's use: by washing it may be rendered so free from grit as to require very little grinding to mix with oil, and become a yellow paint of commerce.

In Cornwall yellow ochre has been frequently obtained under somewhat similar circumstances, but the lodes being small the supply has been partial and irregular, and the carriage generally costly. In old adits there are frequently found deposits of ochre, which are sometimes saved, but often neglected. During my late visit to that county I was in one from which I estimated 200 tons might be easily obtained, at a cost of 7s. 6d. per ton, of the value of 2s. 10s. per ton—a good help to pay for clearing up the old adit. But this was only the deposit of the water exuding from the lode, and an accumulation of many years; the sources in Ireland I allude to are in the backs of great untouched (except for discovery) copper lodes. I know of one nearly 40 feet wide, in the face of a cliff, and running into a mountain more than 2000 feet high.

Barytes, now also extensively used as a pigment, especially in the adulteration of ground white lead, is found in many situations, sometimes in connection with lead lodes. Large quantities have been sent from Ireland for these purposes, but I have never seen any place at which the article has been so carefully prepared as it is in Scotland, though the Irish article is of far better colour. Another great drawback to success has been the want of capital applied to the proper use in the preparation, as well as a certain necessary treatment and selection of the raw material when raised from the mine.

Both carbonates and sulphates of barytes are procurable, the former in the greater abundance; they are to be found in the counties of Cork, Tipperary, Monaghan, Armagh, Kerry, and Clare. The finest ochres (yellow) are to be had in Mayo: by proper treatment in roasting a very superior red is to be obtained. I am glad to be enabled to add that both of these substances—that is to say, barytes and ochre—are about to be properly tested by English gentlemen; parties are at present in Ireland with that object in view. One I know will have all the experience and ability brought to bear on it that the most anxious adventurer can desire, and I have little doubt of his favourable opinion, and of the successful application of modern and approved adaptations. Should these prove as I anticipate, they will undoubtedly assist in and lead to the development of the more valuable metals beneath and associated with these surface deposits. When the lodes become remunerative from the commencement, though they cover only part of the outlay, yet they become very encouraging and attractive to adventurers, in contradistinction to the too frequently hope-deferred practice.

I hold and maintain that in Ireland vast lodes exist, which may be wrought profitably, and profits soon made, from the fact of the mines being shallow, frequently in mountain sides, requiring but little machinery, and that machinery can generally be worked by water-power. Bismuth and tin are reported as having been found occasionally, the former in Donegal, the latter in Wicklow. After a most diligent search for tin, I failed to detect even the slightest traces of it in the Wicklow granite and surrounding slates; nor did I find any granites which in Cornwall or Devon would be deemed favourable for stanniferous deposits. I have seen specimens said to be from Wicklow; and were they not authenticated by names as the finders, who are gentlemen beyond suspicion, their originality would be questioned by those accustomed to tinstone. Their extreme rarity, even in cabinets, is sufficient proof of scarcity, and the presence of lead in the Wicklow granites would lead to the presumption that the tin, like the gold of that district, may exist, but too sparingly distributed to be of consequence in a mining point of view; still the knowledge of their being in the rocks are evidences of the variety and mineralised character of the strata.

No substance, however apparently trivial, should be allowed to escape the notice of the geological student or exploring miner, as if the article itself be not of present value it may be indicative of some-

thing not immediately apparent, but, nevertheless, important in arriving at conclusions.

The exhibition of specimens in the rooms of the various Dublin institutions display an immense collection and variety of useful productions. Strange then, indeed, is it that with all these evidences, and with the most convincing of proofs—rich productive mines at work, the prices of which, during the late depression of mining property generally, have been of unexampled steadiness,—still the mines of Ireland, as a whole, have been neglected, or but partially and unfairly tried. The object of these papers is to set the matter in its true light; and, now that the Fenian mania is at an end, some of the surplus capital that must be invested in such works may be expended in a country which offers every conceivable advantage, as may, I presume to think, be gathered from the facts I have detailed, culled from many years' practical observations, and known in detail to a large number of practical miners, whose information and assistance I now gratefully acknowledge. I purpose shortly to introduce the subjects of slates, clays, &c.

GEORGE HENWOOD.

LLANBERIS SLATE COMPANY.

SIR,—I quite acknowledge the truth of the remarks by "A Man of Experience," which appeared in your Journal of the 12th inst., although in fairness to Mr. Emerson I cannot but feel that they were unequalled in the present instance; for, as the Llanberis Slate Company has until now been engaged almost entirely on a "dead work," the mention of 60,000 slates having been made in November was intended merely as an announcement that slate making had commenced on some of the floors. From Jan. 1 the monthly reports will be forwarded to the *Mining Journal*, and, doubtless (with the usual courtesy of the Editor), duly inserted. These reports will contain not only the number of slates made, but the various sizes, and any other information likely to interest the shareholders and the public.—*Sise-lane, Bucklersbury, Jan. 18.* THE SECRETARY.

FRONTINO AND BOLIVIA COMPANY (LIMITED).

SIR,—The directors think it their duty to notice the letters of "X. Y. Z." and of "A Shareholder," in your last number, and have instructed me to make the following communication in reply. It is quite true that there has been some insubordination at the Bolivia Mine; that in the month of October the English miners laid claim to the gold produced in that month, insisting on its being applied to the payment of their wages; and that Mr. Rouch's authority, as the principal agent of the company, has been resisted. It is also true, as the directors believe from what they have heard, "that private advices" to that effect have been received. These private letters were, however, addressed to the directors, or any of them, nor had they for some time any knowledge of them, but were sent to a former officer by some of the company's present officers at Bolivia, who were themselves the leaders in the movement. It is right the shareholders should know that it was the unsatisfactory conduct of one of the officials in Bolivia that caused the directors, at the latter end of 1865, to engage and to send out Mr. Rouch. That gentleman's character and qualifications induced them to confide in him, and his subsequent conduct has not diminished their confidence. The original objects of Mr. Rouch's mission were correct and put in order much that had been neglected and mismanaged; to ascertain the boundaries, and value of the mines; to see that the conveyance of title from the former company was complete, and in legal form; to take proper steps for resisting any encroachment of the natives on parts of the property; to report generally on the company's affairs; and to devise and initiate a system under which Mr. Goyen and his successors might in every branch thereof advantageously conduct the mining operations.

Although at that time there was no intention to supersede or displace anyone, and Mr. Rouch's instructions were, accordingly, to act in a conciliatory spirit, it was soon evident to the directors, from the information they received, that no such efforts on the part of Mr. Rouch could succeed, and they were consequently compelled, in the spring of last year, to recall the officer, who appeared to be the chief obstruction; but previous to receipt of this dismissal, unwilling to submit to any restraint, either from the directors or their representative, he voluntarily quitted the company's service, and returned to England. Not satisfied with the injury he has inflicted by his own mismanagement, he has ever since manifested a spirit of hostility to the company.

Before leaving the mines he evinced that spirit in all his intercourse with Mr. Rouch, and the same spirit has, in pursuance of the influence of his example, ever since continued to prevail among his subordinates at Bolivia; and a correspondence has been, up to the present time, accordingly kept up between Bolivia and England, with the double object of getting testimonials from these people in favour of the late officer's conduct, and of maligning all those who, from a sense of duty, have been compelled to take part against his proceedings. The objects with which Mr. Rouch originally was sent out did not require that he should hold full powers, and, taking advantage of this circumstance, those engaged in working the mines refused submission to him, and disregarded his authority. As soon as this was known to the board, steps were immediately taken to place Mr. Rouch in a proper position, so as to represent the authority of the board itself, and to enable him to enforce his own orders. Full powers were accordingly sent out to Mr. Rouch by the mail on Sept. 1 last, which would give him the supreme command.

All the funds of the company in New Granada have been put under his exclusive control. He has the power of dismissal over the company's servants to the fullest extent, and, in the course of a few months, to congratulate themselves on the fact that they are quite satisfied that all further insubordination will be at once suppressed. Although the directors have given these details, it is right they should add they did not when they received the last accounts from Mr. Rouch, nor do they now, attach any importance to the manifestation of feeling at the Bolivia Mine; they know the source where it comes, and do not think any practical injury can arise from it. Moreover, the deficiency in Mr. Rouch's powers have been supplied, and no one can dispute his authority. The directors think it necessary only to say further that they have no desire whatever to keep back from the shareholders any information they receive from the mines, which information shall be at all times open to them.

HENRY L. PHILLIPS,

Managing Director.

PROSPECTS IN THE GWENAP DISTRICT.

GREAT NORTH DOWNS MINE.

SIR,—It will be in the recollection of many of your readers that some time since, in drawing attention to this property, I stated that "every foot sunk in Sleggan's shaft the ore-bearing part enlarges and increases in value, and that my opinion was they were on the top of a large deposit of copper." On perusing the agent's report, it will be seen that what I then said is fast being confirmed; suffice it to say, the lode in the shaft is now worth 50l. per fm., and improving as increased depth is attained; the lode is also becoming larger, the ore part being full 5 ft. wide. This shaft will be sunk with all speed to the 86 fm. level, which will take about three months to accomplish, when a level will be driven east and west on a splendid course of ore. King's shaft, which is 60 fms. further east than the one in question, is down to this level, and in the end driving back towards Sleggan's there is a very large ore lode, showing that there is a continuous bunch of ore for a great length, and that nothing is wanted but a little time to open up the ground to bring this mine into a dividend state. Within the last six months a great outlay has been made in the erection of machinery, which expense is now got over, and a magnificent 80-in. cylinder steam-engine has been erected, and pitwork all fixed to the bottom, so that sinking in this course of ore will now be continued without interruption, and those who invest at present prices will have, in the course of a few months, to congratulate themselves on their fortunate purchase. It must be understood that they are now entering the second series of ore-bearing ground, which in this district has never failed to yield enormous quantities of mineral; indeed, it is identical with what proved to be the case on the resuscitation of the rich Clifford Amalgamated Mines, some half century or more ago, when after sinking through what may be termed a transition stone they came on one of the largest deposits ever discovered in Cornwall. While on this subject, I will merely say, in reply to several of my enquiring friends, that negotiations are being entered into for the purchase of a mine and machinery adjoining and on the course of the same productive (Clifford) lodes, which left off precisely similar to the ones named, and on sinking another 20 fms. (judging from analogous circumstances) success is sure. A portion of this will be offered by-and-by to the public, without premium; a call will be made to pay for the mines and machinery, and to provide a working capital, and I repeat that deeper sinking, combined with systematic arrangements in the conduct of operations, is only required to lay open one of the richest mines in Cornwall.—*St. Day, Scornier.* CHARLES BAWDEN.

THE GREAT EAST WHEEL ROSE AND OLD SHEPHERDS SILVER-LEAD DISTRICT.

SIR,—Having visited this district, I beg to forward a few remarks for the information of your readers. In the first place, I visited the celebrated EAST WHEEL ROSE OLD MINE, where I find operations have been resumed with spirit; several men are engaged in securing the adit level, &c., and it is anticipated the sinking of the new engine-shaft will be commenced in the course of a few days. A company is formed for the working of a new south lode, and the general opinion of practical miners is that large deposits of silver-lead ore will be found in paying quantities at a very shallow level. East Wheel Rose, in its former working, paid to the adventurers 274,500l. in dividends in 14 years, while Old Shepherds paid in dividends 161,276l. in 10 years, and of course this district ought not to be neglected.

PENHALLOW MOOR MINE should be watched with great interest. It adjoins East Wheel Rose. The engine-shaft is sunk 27 fms. below the adit level, and at this point the lode is worth 20l. per fm., and the agents hope to see the 37 fm. level by the end of March, and the lode out, which they anticipate to be a very rich one. This little mine, from present indications, is likely to be a great prize in the present year, 1867.

NORTH SHEPHERDS adjoins Penhallow Moor Mine on the west, but I find operations are suspended, and all the pitwork left underground; but I believe the day is not far distant when operations will be resumed with vigour. In my opinion, this mine ought to be working with spirit, as a number of lodes run through the sett, which is highly mineralised. While looking over the ground

I met with the agent, who was left in charge of the materials; he pointed out the district lodes, and informed me that since the engine had been idle he had cut a large iron lode. I went to see it, and I should say the lode is from 12 to 15 ft. wide—a large mastery lode, composed of red and white iron, and occasionally stones of lead. This is a lode of great promise, and of itself a first-rate speculation, as good iron could be raised for the market at once. I wonder if the shareholders in the mine are aware of such a lode being opened in their set; if so, I am surprised to think something is not doing. Much may be said in favour of this district, and when we look at the immense returns of East Wheel Rose and Old Shepherds, I am inclined to think it the best silver-lead district in Cornwall.

CARGILL MIXE for many years was in a tottering state, but by perseverance in keeping down the engine-shaft made good discoveries, and for some time stood in the Dividend List; and by good management it is likely to become a first-class paying concern. The engine-shaft is in course of sinking below the 130 fm. level, and at this point a rich course of silver-lead ore has been met with, superior to any ever seen in the mine.

GREAT RETALLACK, after driving the adit level for years, have now confined their operations to sinking a new engine-shaft, where they have a most promising lode, which will yield full 1 ton of rich silver-lead ore per fathom. This mine is likely to turn out a great prize.

Let us look for a moment at WEST CHIVERTON, and see what the 90, 100, and 110 fm. levels have made. What is the result of deep levels? Riches in abundance. Deepen your shafts, young mines. You must go deeper to find lead ores in paying quantities, and I have every reason to believe if the young mines in Newlyn district were properly developed the shareholders would receive great rewards for their outlay. Deepen your shafts, and great will be your reward.

A VISITOR.

OLD WHEEL RUSSELL, AND SOUTH BEDFORD.

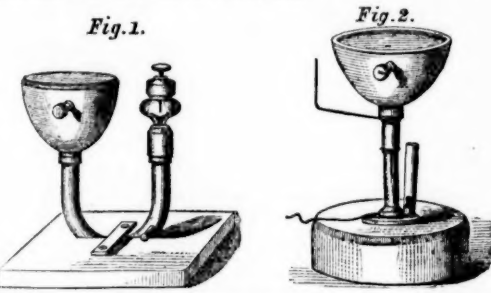
SIR,—We have heard "Justice" and "Right" on this subject, but "Right" is not for the first time in this world, and his letter might have been written by a lawyer. Now, it is of importance to note that the Wheel Russell lease and sett were granted some three or four years after that of South Bedford; therefore the "pink line" was, as far as the map on the South Bedford lease shows, the south boundary of South Bedford, for several years before Wheel Russell was in existence. The late Mr. John Hitchins, who was both surveyor and mineral agent for the Duke of Bedford, apportioned both setts, and made both maps; and in the map he made for Old Wheel Russell this "pink line" (as fatal to the Russells as Sir Colin Campbell's "thin red line" was to the Muscovites at Balaklava) is their north boundary. As to the 1000 ft. spent on our sett in driving 30 fms. of ground on the course of the lode, and putting up small horse whim, if this be true I pity the shareholders—but query? The rest of "Right's" letter is "mere leather and prunella."

Jan. 16.

ANOTHER SHAREHOLDER.

ANSELL'S FIRE-DAMP INDICATOR FOR COAL MINES.

Recent events have given great interest to the invention of Mr. Ansell. It is hardly to be expected that Mr. Ansell would have left his indicator as it was when first introduced, especially as he has largely tested the instruments in coal pits in the positions where they would be required for use. They entirely answered the purpose for which they were proposed—the indication of fire-damp, when accumulating either slowly or rapidly; but there were objections which on the face of them were serious, and which by practical men were considered fatal, unless under exceptional circumstances. Guided by the opinions then expressed by those most concerned, Mr. Ansell endeavoured to find a more simple form of instrument, which could be readily understood by a workman of ordinary intelligence. In coal pits there are many casualties—including the bulk of the accidents arising from explosion—caused by a sudden irruption of fire-damp (carbonated hydrogen) to such an extent as to render the atmosphere in even a mile of space explosive in a few minutes, and there are cases on record where an enormous space has been so polluted in a few seconds; but the common event is to find that a fall of roof, or the breaking in of a thin part in the sides or floor of a gallery, liberates an amount of gas which, by mixture with the ordinary air of the pit, renders the whole explosive. This mixture travels on slowly with the ventilation, till presently it meets a light, and possibly an hour after its first formation destroys many lives. In all such cases Mr. Ansell proposes to use an instrument, of which Fig. 1 is a sketch.



It consists of an iron funnel, provided with an iron U-tube, one end of which is closed by a piece of glass tube fixed in brass, to which one pole of a battery is attached; the upper part of this glass tube carries a brass collar, through which passes an adjusting screw, to the lower end of which is fastened a piece of copper wire with a platinum point. Mercury is poured into the funnel till it rises in the glass tube to a convenient height. This mercury is allowed to find its level by the opening of a valve, when setting the instrument.

The septum is a tile of Wedgwood ware, and closes the open part of the funnel, good sealing wax being the best cement for securing it in its place. The other battery wire is connected with the instrument, so that if diffusion take place the mercury is pressed up against the platinum point, and thus communication is established. Mr. Ansell has found that this instrument gives warning in four seconds if the mixture of gas be still below the point of explosion; but, by adjusting the point, so that there is not more than the thickness of a shilling between it and the mercury, a dangerous irruption may make itself known in two seconds. A source of great danger is that state of the pit which arises from the gradual bleeding of gas from the coal. As one walks in a pit one hears a continual click, somewhat like the noise of a cricket. In some pits this may arise from the settling down of the strata and cracking of the coal, but the experienced ear soon knows the difference. Should any obstruction arise to the ventilation, this bleeding very gradually raises the atmosphere from zero (the point of purity) to the point of explosion; or it may be that a gradual fall of the barometer admits of the oozing out of gas either from a goaf or from the mass of coal, and this, although very minute, may be to such an extent as to render explosive the whole air of the pit, if the ventilation be not very good. There are parts of the pit where gas may so accumulate in half an hour; others where it may be two hours; and, again, others a whole day, in rising to a dangerous mixture. To meet such cases Mr. Ansell used, in the first instance, an India-rubber balloon; but this, although perfectly good for its purpose, was too fragile. Therefore, he has abandoned that plan, and he now uses a self-inflating machine, and by regulating the thickness avoids the evil of diffusion to such an extent that he can, and does, in the pit practically show these gradual accumulations. Mr. Ansell has found that by replacing the Wedgwood ware tile (in Fig. 1) with marble of 1/4 inch thick, he can show the presence of an explosive mixture of fire-damp and air which has been half an hour in forming, or by using marble 1/2 inch thick he shows if it has been two hours rising from zero to the explosive point. In all such cases notice, if it be so desired, may be given before the mixture becomes explosive, the warning being continued for a considerable time, even if the atmosphere does not become more foul. It must, however, be understood that the very circumstances which admit of the air becoming "fouled" to the extent of 10 per cent. also admit of its going on till 10 or more per cent. has been reached, always remembering that these instruments are to be fixed high up in the roadway or goaf, and that the gas accumulates there, notwithstanding the law of diffusion. It is no uncommon thing to find 30 per cent. of gas next the roof, at 6 in. lower 20 per cent., and at 15 in. no gas at all. The cause of this will be discussed on some other occasion.

It is proposed to fix the instruments side by side, one for sudden and the other for slow accumulations. In pigeon-holes cast in the iron props used to support the roof, these pigeon-holes being clear all through, so that the gas can surround the instruments, or sweep over them; for the gas as it occurs in the pit is very curious in its habits, and from causes too minute to enumerate here, it "goes away" from a spot with very little disturbance. The pigeon-holes being formed in iron posts would protect the instruments from falling roof, &c., while grooves may be cast in the sides of these posts for the telegraphic wires. It has been objected by some that these instruments would cause greater destruction of life than now obtains; but these persons forget that they are not intended to displace other means of safeguard. They are simply proposed as additional means of knowledge. For the indication of carbonic acid Mr. Ansell makes a necessary alteration, which will be seen in Fig. 2.

For the indication of carbonic acid Mr. Ansell makes a necessary alteration, which will be seen in Fig. 2. This hardly needs description, for it will be seen at a glance that the circuit is completed by the rising of the mercury to the wire within the precincts of the closed chamber formed by the neck of the funnel, and is adjusted for use by turning the base on which it stands, when a cork rises against a leather bag, and presses the mercury up to the required height. Whether marble will stand long without disintegration by carbonic acid has to be determined; if not, it can be replaced by another septum. This instrument is proposed for use in those mines where carbonic acid becomes a dangerous substance for the miner. It has been sought by the French wine growers as a means of telling the time of the commencement of fermentation, and it seems probable that the English brewers will use it for a similar purpose.

In the event of fire-damp being known to exist, either when found by the fixed indicators or by the safety-lamps, Mr. Ansell proposes for the use of the miner, the manager, or his deputy, an aneroid indicator, the description of which has already been published. Some persons who have not cared to read the description, or to make themselves acquainted with the use for which this instrument is made, imagine that it possesses strange properties. It is, therefore, necessary to say that it is not used for the detection of gas in the pit. The intention of this particular instrument is that it shall be used to determine the amount per cent. of fire-damp or carbonic acid gas where they are known or suspected to exist; and for these purposes it must be used rigidly according to the instructions given with it, not according to the fancy of the user or as he thinks it should be used. It must be taken, with its brass cap still on, into the neighbourhood of the suspected atmosphere, and allowed to remain there till it has acquired the temperature of that place; this usually requires a few minutes—say, five. The valve must then be opened to allow it to find the true zero of that altitude. Then the valve must be closed, and the index watched for a few seconds to see if it be stationary, and if it be so then the brass cap must be removed,

manufacture of coke. In Moravia, near Brünn, is the Rositz basin, and to the north-east is the Ostrava basin, which is a prolongation of that of Prussian Silesia, both giving a good bituminous coal. In the provinces of Upper and Lower Austria, Styria, the Tyrol, and Carinthia lignite predominates; in Dalmatia and the littoral there are some very thick seams of bituminous coal. In Transylvania and Galicia lignites alone are found, and lignites are almost alone in Hungary and the Banat. Opal is found in Hungary, and Bohemia produces various precious stones, and the white porcelain clay in the well-known Saxon ware, so justly esteemed.

ENGLISH ENTERPRISE IN RUSSIA.

That the industrial resources of the Russian empire afford an enormous field for the profitable employment of almost any amount of capital is too well known to need comment, yet comparatively few Englishmen have hitherto turned their attention to enterprise in that direction. With the exception of a few railway undertakings, almost no other project for which English capital has been sought is that of the working of the Vyskousky Iron Mines, and the obstacles encountered, but now happily removed, in its development have certainly been anything but encouraging to its promoters. THE RUSSIAN (VYSKOUSKY) IRON WORKS COMPANY was formed, accordingly, to the terms of the prospectus, for working the works known as the Vyskousky Iron Works, and the officials of the company probably never entertained the idea of working any other properties; but the man of business would readily understand that circumstances might arise which would render it desirable to purchase a neighbouring and troublesome concern, to prevent competition. No doubt, this fact in view, power was taken in the Memorandum of Association to extend their operations at discretion over the whole of Russia; and, however, afforded a pretext for certain subscribers for shares in purchasing their connection with the company—a step which has, of course, effectually prevented the company from making progress, and rendering its almost entire reconstruction necessary. Without making the various proceedings connected with the litigation, it may be stated that the dissentient shareholders were but little less numerous than those willing to co-operate with the directors, and that the effect of this nearly equal division has been to bring about a compromise, which, whilst highly favourable to the dissentients, will place the remaining shareholders in an improved and satisfactory position, which will well compensate for the delay which the misunderstandings have occasioned.

The compromise, to which it appears that all the dissentient shareholders have given their written assent, is based upon the principle of treating the recalcitrant shareholders as retiring partners, and paying them their claims by instalments. The company's manager in Russia reports that he can calculate upon an annual profit of 12,000*l.* in the present scale of working, and circumstances tend rather to promise an increase than a decrease of this scale. To provide for the claims of the recalcitrant shareholders, and for certain debts to third parties, 60,000*l.* will be required. The debts will be met by the 14,000*l.* remaining unpaid on the two last calls by those shareholders who continue members of the company. To meet the outstanding claims and the repayments to shareholders who retire from the company, the directors propose to issue debenture bonds (not exceeding 46,000*l.* in amount), of which 5000*l.* have been set aside for the purpose of compromising the outstanding claims. The debentures will be payable by annual instalments in three, four, or five years, according to the option of the first holder. Those bonds which are payable in three yearly instalments will carry 4 per cent. interest per annum; and those payable in four yearly instalments will carry 5 per cent. interest per annum; and those payable in five yearly instalments will carry 6 per cent. interest per annum; and in cases where the first recipient of the bonds may prefer to receive payment of the amount secured thereby in one sum at the end of three or five years (which many shareholders have agreed to), the bond will also bear interest at the rate of 6 per cent. By this means all parties will be protected from loss and litigation, and all will be equally interested in promoting the welfare of the company.

To prove that the internal dissensions are at an end, it is only necessary to refer to the fact that all except two have agreed to the arrangement; and as to the prospects of the enterprise, as an industrial undertaking, proving remunerative, that is the fact stated by the Chairman of the meeting, on Saturday, that by a recent ukase prohibiting the introduction of foreign-made iron into Russia the company will be greatly benefited, and that they had received 8000*l.* on account of profits during the last eight months, and, altogether, remittances which had enabled them to reduce their liabilities in England, from 19,000*l.* to 10,000*l.*, and in St. Petersburg from 2300*l.* to 2000*l.*, besides paying for all the litigation. When those were extinguished he believed that the shareholders who remained would be in possession of a very valuable property.

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE SWANSEA TICKETINGS FOR THE QUARTER ENDED DECEMBER, 1866:—

Mines.	Tons.	Amount.
Berchaven	1005	£ 7,279 16 6
Ballycunnisk	120	537 0 0
Cronchane	62	268 13 0
Connorree	91	223 10 6

Total

COLONIAL.

Wallaroo	870	£ 6,026 2 0
Newfoundland	658	5,441 4 0
Cape Ore	230	4,755 12 0
Moonta	178	2,124 15 0
Concordia	82	829 9 0
Pomona	21	266 9 0
New Cornwall	69	549 0 0
African	6	135 12 0
Australian Ore	13	107 8 0

Total

FOREIGN.

Cuba	572	£ 5,575 7 0
California	772	5,348 1 6
Yar	152	2,068 1 6
Iloz de Barceña	80	808 0 0

Total

RECAPITULATION.

British	1281	£ 8,544 0 0
Colonial	2118	20,735 12 0
Foreign	1576	13,799 10 0
Regulus and precipitate	167	4,489 6 0
Sludge and sundries	40	189 3 6

Total

COMPANIES BY WHOM THE ABOVE WERE PURCHASED:—

Names.	Tons.	Amount.
Copper Miners' Company	131	£ 974 5 6
Freeman and Co.	275	2,557 3 0
Griffith and Sons	559	6,034 10 0
Sims, Williams, and Co.	368	5,736 5 0
Vivian and Sons	816	7,248 10 0
Williams, Foster, and Co.	619	6,202 0 0
British and Foreign Copper Company	3	125 11 0
Mason and Elkington	353	3,877 17 7
Bankart and Sons	419	3,252 16 6
Charles Lambert	668	3,748 10 0
Sweetland, Tuttle, and Co.	197	2,138 3 10
Penclawdd Copper Company	628	4,820 11 0
Landore Copper Company	96	1,060 17 0

Total

£47,767 11 6

MR. NICHOLAS ENNOR.—We regret to learn that during the present inclement weather Mr. Ennor had a fall, which caused a compound fracture of the right leg. This unfortunate accident will prevent him for some time attending to his engagements.

THE RAILWAY ALMANAC.—The edition of this almanac for the current year, compiled by MR. WILLIAM PAGE SMITH, of the "Railway Record," has just made its appearance, and gives evidence of the same enormous amount of care having been bestowed upon its production, which, as the greater portion of the book consists of really ably written original articles, must not be considered as synonymous with compilation, as has characterised it in former years. In addition to the usual calendar matter, the almanac contains articles on Joint-stock Banking Affairs and the Crisis of 1866; Joint-stock Extension and the Panic of 1866; Coal, Iron, and General Mining Industry; Profit and Bonus Distribution in Life Assurance; Facts on the "Progress of Land and Building Societies; Cotton Imports and Future Supplies; Anomalies of the Patent Laws, and other subjects. The almanac is one which well deserves a place in the counting-house of every man of business.

Platinum has been discovered in large quantities in New Zealand.

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE CORNWALL TICKETINGS FOR THE QUARTER ENDED DECEMBER, 1866:—

Mines.	Tons.	Amount.
Devon Great Consols	4883	£21,365 5 6
Clifford Amalgamated	3099	10,528 17 6
South Caradon	1420	10,328 2 0
West Seton	1507	7,592 12 6
Wheal Seton	1828	7,073 8 0
Prosper United	1272	4,269 7 6
Marke Valley	1833	4,163 16 6
East Caradon	946	3,658 11 6
Carn Bre	422	3,516 9 6
Wheal Friendship	427	2,858 9 0
West Wheal Tolgus	662	2,712 0 0
East Carn Brea	635	2,321 6 6
Carn Camborne	486	1,282 16 0
Wheal Basset	490	2,379 18 6
South Wheal Crofty	643	2,218 15 6
Far Consols	391	2,166 5 0
Rosewarne United	374	2,142 13 0
Brookwood	405	2,111 7 0
Wheal Rose	405	1,985 15 6
Fowey Consols	520	1,860 4 0
East Pool	505	1,769 15 6
Great South Tolgus	405	1,705 0 0
West Damsel	454	1,684 4 0
Phoenix	378	1,632 15 6
Hingston Down	510	1,576 10 0
Orel Tor	519	1,504 4 6
South Wheal Frances	269	1,434 15 6
North Treskerby	521	1,429 17 0
Bedford United	357	1,397 4 0
West Basset	261	1,175 6 0
Hallenbeagle	302	1,142 9 0
Devon and Cornwall	303	1,073 12 6
Gawton Copper	353	1,071 9 0
Botalack	109	1,019 13 0
Craddock Moor	145	958 18 0
West Caradon	165	906 15 0
Dolcoath	220	904 16 0
Great North Downs	184	791 15 0
Wheal Polmar	140	789 5 0
Phoenix United	187	755 7 0
Wheal Emma	148	699 2 6
Crenver and Abraham	208	686 6 0
East Rosewarne	119	673 19 6
Bambridge	118	671 15 6
South Dolcoath	118	623 13 0
West Sharp Tor	68	520 13 0
East Wheal Basset	158	519 1 0
Prince of Wales	76	509 12 6
East Russell	110	503 2 0
Furdon	72	457 4 6
Rosewarne Consols	90	392 14 0
Tolcarn Vein	112	362 16 0
Camborne Vein	104	350 0 0
New Cornish	104	334 4 0
Wheal Crebor	107	330 14 6
Creake	90	309 10 0
Glasgow Caradon	126	307 4 0
East Grenville	121	295 2 6
Treleigh Consols	77	280 6 0
Copper Hill	97	283 9 0
Grainger and St. Aubyn	32	264 13 6
Levant	89	250 4 6
North Grambler	60	249 8 0
Mellancarr	119	245 1 0
Trefry's Regulus	24	226 1 0
North Downs	54	226 10 0
Wheal Margery	81	211 8 0
North Roskear	55	204 17 6
New East Russell	35	200 7 6
St. Bury United	54	191 7 6
New Treleigh	50	183 15 0
Gunnislake	20	181 5 0
Tincroft	74	172 12 0
Champion's Ore	48	172 16 0
Wheal Polmar	45	148 10 0
South Condurrow	20	141 10 0
Pennance	49	135 0 0
Pendennis Consols	25	134 7 6
Gonenna	46	129 17 6
West Maria and Forder	72	124 2 6
Caradon Consols	34	122 8 0
Lady Bertha	27	115 4 6
Wheal Curtis	59	111 15 6
Wheal Trannack	49	107 5 0
Great Wheal Busy	58	99 2 0
Rosewell	15	91 10 0
Sortridge Consols	26	89 14 0
Pendennis United	35	87 0 0
Wheal Grenville	35	85 17 0
South Tolgus	36	83 14 0
Pedn-an-drea	20	80 10 0
Wheal Buller	32	77 9 6
North Robert	12	67 16 0
South Wheal Basset	20	65 0 0
West Condurrow	13	62 14 6
Wheal Edward	36	61 10 0
Ciljeh and Wentworth	12	54 12 0
Higgins's Ore	29	52 9 0
Binglehole's Ore	13	40 0 0
Collacombe	28	35 13 0
Stray Park	11	34 18 6
Jennings's Ore	4	34 16 0
Old Gunnislake	14	22 15 0
Ivey's Ore	11	22 0 0
Crane	7	16 6 6
Pembroke	19	13 10 0
Wheal Clarence	6	10 10 0
Daniel's Ore	2	7 15 0

COMPANIES BY WHOM THE ABOVE WERE PURCHASED:—

Names.	Tons.	Amount.
Vivian and Sons	4879	£22,913 11 10
Freeman and Co.	1856	9,113 15 6
P. Grenfell and Sons	3264	16,496 0 0
Sims, Williams, and Co.	3692	13,216 2 3
Williams, Foster, and Co.	6097	12,643 2 9
Mason and Elkington	8144	12,987 17 0
Bankart and Sons	1697	6,165 15 6
Copper Miners' Company	2234	7,576 2 0
Charles Lambert	2288	7,527 19 1
Newton, Keates, and Co.	680	2,870 2 0
Sweetland, Tuttle, and Co.	1584	6,101 12 9
Penclawdd Copper Company	1463	6,939 17 6
Hadland and Co.	72	124 2 6
Goole Alum Company	472	1,508 4 0

Total

£135,973 6 6

[ADVERTISEMENTS.]

From Mr. EDWARD COOKE:—There has been a steady business doing during the week; the course of the Mining Market looks very encouraging, and there is every prospect of an active period during the spring of this year. The prices of metals are more favourable to the holders of mining stock than for a long time past. Tin continues firm, with a good prospect of another advance. The standard for copper ore was again higher at the weekly sale on Thursday last, at Truro. The advance in the price of copper ore—of the average quality—during the past month is about 10s. to 11s. per ton. This to a mine like Prosper United makes a difference of some 200*l.* to 250*l.* per month; and the advance in the price of tin during the same period makes a difference in favour of the shareholders in this mine of at least 100*l.* per month. Seeing, therefore, that before the late rise in the price of copper and tin took place the Prosper United Mines were making a good monthly profit, there is every prospect of the original shareholders, whose shares have cost them 8*l.* to 10*l.* each, soon being enabled to realise cost price for them, if they feel disposed to sell. At the meeting next month there will be an excellent statement presented, and a dividend of 5s. per share declared. Instead of the shares standing at 4*l.*, they should properly be 6*l.* to 7*l.*, and this, being less than has been paid on them, is by no means an unreasonable price for them. Why Great North Downs shares, upon which calls are regularly made—and there is one pending now—should be selling at about the same price as Prosper United shares is one of the anomalies of mining. Either one is selling very high, or the other at a ridiculously low price. WEST CHIVERTON have had a rise of several pounds during the week. This splendid mine is looking better than ever.

There is a lead mine that at the present time is deserving of the attention of anyone inclined to buy. It is certainly one of the best progressive lead mines in England. I allude to CALDBECK FIELDS. I am informed that the call of 5*l.* just made will pay for all the new machinery, and leave a good balance in favour of the company. I consider Caldbeck Fields is destined to become one of the greatest lead mines in Cumberland. The shares, with 30s. paid, may now be bought at about 10s. discount. I cannot too strongly recommend this mine to the notice of the public generally. The shares are limited to 2*l.*; therefore, the utmost liability is only 10s. per share, and of which it is not probable that 5*l.* will be required to bring Caldbeck Fields into the Dividend List. Sir Robert Briscoe, the Chairman of the directors, who holds a considerable interest in the mine, is an excellent man of business, and the name of a gentleman connected with the direction of an important railway has been mentioned as likely to join the board of directors of the Caldbeck Fields. EAST LOVELL shares have not responded either to the price of tin or the improved position of the mine. With the prospect of a good dividend at the next meeting, and the cutting of the lode in the 6*l.*, there is a margin for a rise of several pounds per share during the next month or two, without a corresponding risk of a decline. The advance in the price of tin, in particular, will benefit Wheal Basset to a great extent. With a little further advance large bi-monthly profits will again be divided by the shareholders, probably to the extent of 4*l.* or 5*l.* per share. There are hundreds of fathoms of tin ground standing between the present workings of Wheal Basset and the boundary of South Wheal Frances, so that there is not any

fear of the former mine becoming exhausted. There are 512 shares only, and upon which between 200,000*l.* and 300,000*l.* profits have been divided. The price is now 72*l.* 10s. to 75*l.* per share, and an excellent share to buy. NORTH CROFTY shares have been in continued demand. The prospects of this mine are of a very high order, and it is predicted that the shares will see a very high figure. PRINCE OF WALES shares seem to be realising all that has been said about them. The lode in the 55, so far as yet seen, promises to lay open a valuable course of ore. East Caradon shares rose from a few shillings to 50*l.* per share. I do not pretend to say that Prince of Wales shares will do the same, but it will not be denied that the chances of its becoming a very important mining property are being every day more apparent. There is a very wide margin for a rise both in this and several other mines I could name.

From Messrs. WARD and JACKMAN:—The whole art and mystery of mining consists in a perfect knowledge of the courses and character of mineral lodes which run through the dark rocks in glistening streams, like the rivers traversing the broad earth with their shining waters. We do not profess to have used the pick and gad ourselves, so we are guided in our remarks by the advice of the most experienced and eminent practical authorities in the several mining districts, and with whom we are in constant correspondence. Founded on such authority, we endeavour to give an impartial statement of facts, and to show the grounds on which success is anticipated in some few mines, with fair chances of becoming remunerative; and with regard to such mines as a favourable opinion cannot be given, we think it best to exclude them altogether. Some of our contemporaries, we are sorry to say, allow their jealousy or personal dislike to individuals to enter into their calculations, and in this manner publish statements at variance with facts. However, there is unquestionably a time to sell as well as a time to buy, and we presume a client may be told to do the former without our proving the mine worthless. Market operations often rig shares in good mines to a higher price than their appearance or prospects warrant, as well as bad ones, and when this is done in either we unhesitatingly recommend our friends to sell at once. The shares may be moved higher by the same means afterwards, but greater will be the fall, which is as certain to come as quarter-day. The public seem to be caught by any outrageous puff, and the bona fide and legitimate speculation, that works its way quietly but honestly, has no charms for many, and consequently, there will always be found talent to take advantage of the ruling passion.

WHEAL BULLER is without change to notice since last reported on, when the different points then being prosecuted were valued at about 152*l.* per fm. The shares, however, have been more in demand. At the meeting to be held at the mine, on Wednesday next, the question of dividing the sett will be considered, and other important matters. At NORTH ROSKEAR there is an improvement in the 205, west of Pearce's shaft, the lode now producing yellow copper ore of excellent quality, worth about 20*l.* per fathom. A call of 2*l.* per share was declared on Wednesday last, and 5 per cent. discount will be allowed on prompt payments; the mine is now in 695 shares only. SOUTH WHEAL BASSET: We have before alluded to this adventure, and now remind our friends that this mine was divided off from Wheal Basset sett some years ago, and it was from this part that the first dividends were given. There are only 512 shares, the present price of which is about 5*l.*, but should a good lode be met with they will rise very considerably. WEST BASSET: We hear another bill has been filed in Chancery against South Frances by the management, which represents about a sixth-part of the mine. We certainly think the opinion of the whole body of shareholders should have been taken before entering into further litigation. Wheal Uny, it is said, will now pay cost, and the shares had been in demand. The following shares have been but little influenced by the rise in metals, and which, nevertheless, we believe will ere long receive more attention—Brookwood, Frank Mills, Rose, Trelawny, Carn Camborne, East Caradon, Mark Valley, East Providence, East Seton, East Russell, Grambler, Great Fortune, Camborne Vein, South Basset, the Grenvilles, and Great North Downs.

From Mr. J. J. REYNOLDS (Union-court, Old Broad-street):—The continued advance in the market prices of tin and copper has given increased confidence, and those who held back from investing their capital in British mines are beginning to realise the fact that it is time to act with decision. In almost every case during the last few weeks where a rise has taken place in the price of shares, there have been numerous instances where the investment of a moderate capital has been expended in developing the resources of mines, from which ultimate profits are certain, the shares in which are now to be purchased at the value of the machinery, and in some cases for less. Everything confirms me in my opinion, as expressed a fortnight since, that the year 1867 will be a most remunerative one for the public who lay their money out in sound and legitimate undertakings. GREAT WHEAL VORS have been firm at 17*l.* to 18*l.*; GREAT LAXEYS at 17*l.* to 18*l.*; NORTH WHEAL CROFTY continue to advance steadily, the price now being 5*l.* to 5*l.* 4*l.*; they will go much higher. Indeed, for a mine that will soon be in a position to make several hundreds a month profit, it should be one of the cheapest shares in the market. WEST CHIVERTON have been dealt in at 5*l.* to 6*l.*, and are likely to advance; EAST LOVELLS 10*l.* to 11*l.*, and good to buy. NORTH DOLCOATH, 4*l.* to 5*l.*, is one of the shares most worthy of notice as a speculation; the great promise of an improvement at the 100 fm. level, now driving, makes them second to none for the chances of a great rise. GREAT SOUTH TOLGUS shares formerly sold at 18*l.* to 19*l.*, and are now to be had at 2*l.* to 2*l.* 6*l.*; this mine is about paying its cost, and the shares should also be bought. In PRINCE OF WALES shares there has been an active business; the recent improvement adds greatly to their value, price 3*l.* to 3*l.* 4*l.*; NORTH ROSKEAR, 6*l.* to 7*l.*. A reference to my notes published on the 5th inst. will show that the opinions I then expressed have been fully borne out by results.

From A. E. PRINCE (Cornwall Mining Exchange):—The Mining Market is productive of still greater activity. It is pleasing that our assertions in the closing part of the last year have been more than verified—1867 having so far realised the expectation or the most sanguine. We strongly advised a purchase in NORTH CROFTY when the shares were merely at a nominal figure, believing, as we did, that this mine was the cheapest for investment. The returns will soon be greatly augmented, and North Wheal Crofty, which has for the last two months attracted unremitting attention, will, doubtless, continue to favour the holders of that important district. Shares are getting scarce, and gradually heightening, so that those who avail themselves of the present opportunity will have no reason to regret their bargain. EAST WHEAL LOVELL, the manager observes, never looked better. DRAKE WALLS: We have been favoured with several gratifying opinions of this mine, which adjoins the Prince of Wales, in the eastern part of Cornwall. We understand that for a number of years the operations have been confined to tin lodes. With an increasing demand for tin, good profits could be given for tin ground alone. A most important feature is that the Prince of Wales copper lodes traverse Drake Walls, and by crossing cutting from the tin lodes, the Prince of Wales lodes can be opened up. Drake Walls tin ore is about the richest in Cornwall. The manager, during the great depression in the tin trade, very wisely kept the tin ground in reserve. Had many mines, selling enormous quantities before the panic reached its grand climacteric, acted as judiciously as the Drake Walls adventurers, many a bad whose prospects are gloomy would now be in a most prosperous condition. GRAMBLER and ST. AUBYN has gradually improved, it being considered unnecessary to make a call at the meeting just held. This mine was once rich for copper, and paid good dividends, the shares rising from an almost worthless sum to about 12*l.* per share. They can now be had at a comparatively low price. The manager concludes his report as follows:—"Having several important points, which will be reached in the next few months, requiring but small outlay, in addition to our returns, I think, when they are proved, that we shall be well repaid for the expenditure by the opening of a profitable concern." COOK'S KITCHEN and SOUTH CONDURROW meetings are now in hand. At the former mine the accounts will show but a small debit balance. SOUTH CONDURROW looks better. The call will be much less than the previous one. STRAY PARK (adjoining Dolcoath, and on the same rich lodes) is looking more promising, the principal feature in this mine (which is the lode) is now being divided into 920 shares, upon which 41*l.* 8s. per share has been paid, including call of 690*l.*—15s. per share—made on the 16th inst.; is the sinking of the engine-shaft. Shares, which are now at about 5*l.*, were a few years since at 6*l.*—a difference of 55,200*l.* on the concern. At NORTH ROSKEAR a call of 1*l.* 2s. per 1-698 was made. There are two or three points of great interest shortly coming off.

TESTING SILVER ORES.—An improved mode of treating sulphuretted silver ores has been introduced by Mr. A. HUNTER, of California, which it is claimed is especially applicable to the treatment of low-produce silver ores, which by the present mode involve a large percentage of loss. The only reason assigned for continuing that wasteful mode is the great cost of submitting the entire mass of the ore to the fire process. By a cheap method of concentration, by which only the sulphurets need be roasted, this expense must be materially reduced, and a large increased gain realised. The economy of the idea rests wholly in the cost and efficiency of the concentrators. Mr. Hunter says—for reducing the ore, use the ordinary battery and a No. 6 screen; concentrate in front of the battery, and as the sand passes off from the tables pass it over a fine screen of No. 80, of 6400 meshes to the square inch. The water and slum pass through the screen, and are run into tanks, and settled. The only machinery necessary for the above process is the ordinary battery concentrators, and a few amalgamators for working the slum. The sulphurets of ordinary silver ores, when concentrated, will average about 5 per cent., or 100 tons will give 5 tons of sulphurets. The average cost of reducing, concentrating, and working is 88 per ton or extracting at least 80 per cent. of the silver contained in the ore as per fire assay, and scarcely any waste of quicksilver. By the ordinary process now in use for low-grade ores, extracting only about 60 per cent. of the fire assay, the cost for working is about 115 per ton; and for high-grade ores, where 80 per cent. is guaranteed from the fire assay, the cost is from 85 to 145 per ton. The difference of the cost of working and the cost of machinery is easily calculated, and the thousands of tons of low-grade ore that would not pay to work will prove highly remunerative for the capital and labour expended by the use of the above process.

CHEMICAL PRODUCTS CONNECTED WITH MINING.

Antimony—Regulus	ton	£54 10 0	Cop. sulph
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Mining Correspondence.

BRITISH MINES.

BEDOL-AUR.—H. R. Harvey, Jan. 16: The shaft is down about 2½ fathoms below the 77, and the ground rather stiff; the lode is 4 or 5 feet wide, producing occasional stones of lead. I have set the shaft to sink for the remainder of this month, by eight men, at 16s. 10s. per fathom. Jones's pitch is looking poor, but the lode may open out again shortly, as it has done often before. Williams's pitch, in the bottom of the 70 south-west, is just as last reported, yielding about 15 cwt. per fathom; there is a kindly-looking lode here, and I expect to get some good lead when they get a little deeper and nearer the swallow. Staley's pitch in the bottom of the 70, on the "Seven Stars," is rather poor.

BOTTLE HILL.—J. Eddy, Jan. 17: Since last week's report I have put six men to sink and stop the bottom of the 12 to prove the lode at a greater depth; the lode in the bottom of the level for the extent of the stop, which is about 8 fathoms in length, averages about 18 inches wide, and produces good work for tin. The lode in the 24, west of shaft, is increasing in size, and how producing both tin and copper, but not to value. The lode here is still small, but much the same character as we find the lode now in the bottom of the 12 further west.—Main Lode: The tribute ground has improved! the lode in the stopes about the same. I expected to have sent off samples for our parcel of tin about this time, but the frost has set in so as to stop all surface work.

BRYNANTLEIGH.—Wm. Wain, Jan. 17: The ground in Lewis's shaft is without any alteration to notice for the last fortnight. The men continue to make good progress in sinking, and the 5-in. lift is keeping the water, although it has increased a little last week.

BRYN GWYN.—H. Nottingham, Jan. 15: In driving the cross-cut west from the workings on the south side of the middle of incline, east of shaft, we have discovered a north and south joint, full of very nice ground, and showing other favourable indications for lead; but to follow the bearing ground in this joint we have had to sink the depth of the joint, which leaves the same depth of ground to be stopped away from the rise to this joint before we can bring in barrow-road to the end, which piece of ground must be stopped away in order to work this ground advantageously; but before going to this expense I purpose driving a few fathoms on the course of the joint to prove it more. The drift in the back of Clark's level is not looking so well for lead, and the ground harder for driving. The level on the incline (as we are following the dip of the ground), driving south from sump, on the south side of the top of incline, continues of the most promising character, but unproductive for lead. The tributaries in Field's level have been getting some good lead from the discovery of ore they made last week.

CAPE CORNWALL.—R. P. Goldsworthy, Jan. 16: The men to whom certain bargains were set in the 90 ft. level end east, and in the 70 ft. level end west, are exerting themselves so as to obtain the premium offered to them in addition to the price. The lode, both in the 90 east and 70 west, is of a promising character. Our tributaries are also working well.

CARADON CONSOLS.—S. Bennett, Jan. 15: In the 90 west the lode is 1 ft. to 16 in. wide, composed principally of fluor-spar and gossan, intermixed with good spots of grey ore. In the east and the lode is also very much like that in the west end in composition, but containing a little more ore. The 30 west has not altered much, the lode continuing from 1 ft. to 1½ ft. wide, and producing a little ore, but not to value; the winze below this level is about the same value as last reported. The Jope's lode is still unsettled, and composed of several branches of ore throughout the end; they appear, however, to be approaching each other, and if so there will be, I think, a change for the better. We expect to again cut into the gossan lode in the 30 west some time next week.

CAMBORNE VEA.—S. Glynn, Jan. 17: The 135 east is worth 13 tons of copper ore per fathom. We have at present 5 tons in level work. We have commenced to drive east from the winze about 10 fms. below the 135; the lode is 2 ft. wide, with good stones of ore, and of a most promising character.

CENTRAL MINERA.—Thos. Hughes, Jan. 17: Victoria Engine-shaft: The ground in the 40 yard level is rather harder, and emits more water. A great change may be anticipated.

CRENNER AND WHEAL ABRAHAM UNITED.—Wm. Kitto, Jan. 16: We are almost at a standstill in dressing; the copper ore, the weather is so severe—snow a foot deep—consequently we shall not be able to sample next Tuesday the usual time. The ore sold last month has not been taken away; the carriers cannot remove it while this weather lasts. We had arranged to sample to-day about 130 tons of rough muddle, but were prevented by the weather. The winze sinking below the 70, at St. George's shaft, has improved; the lode is divided; the north part will produce 14½ ton of good ore per fathom. In the 80 fathom the lode is 2 feet wide, looking better. In the 90 fathom level we are driving on the north part of the lode. We shall take down the south part in a day or two. All other operations are much the same.

CROWAN AND WENDON.—R. Reynolds, Jan. 15: During the past week we have hauled a pile of tin stuff from the adit level, and hope shortly to have a small parcel for sale. The weather prevents us from making that progress with our surface work that we should wish.

CUDIPA.—F. Puckey, Jan. 16: In the 130 cross-cut north, west of Walker's shaft, we have cut into the lode about 3 ft., which is very hard and spare for progress, but, so far as seen, is of great promise, producing good work for tin; and, from present appearances, we consider that we have not yet reached the main part of it. The lode in the different stopes and winze sinking below the 117 ft. level is without alteration in size or value from what we stated in last week's report.

DALE.—J. Nines, Jan. 14: As nothing has occurred to alter my opinion, I strongly advise to adopt the course I have already laid before you—to drive a cross-cut west from the Pipe vein in the 44 in the old mine, to the New Pipe and Lum veins, and to offer all the other parts of the mine on tribute, which at this time averages all out the same yield as during the last three weeks. I calculate having about 10 tons of lead and 40 tons of blende, but the severity of the weather greatly impedes our dressing operations, but I trust will soon be more favourable. Again reverting to the cross-cut, I consider it a very important trial, and likely to realise the most encouraging expectations.

DEVON AND CORNWALL UNITED.—T. Neill, Jan. 15: In the 24 cross-cut north we have cut into the lode about 3 ft.; it is composed of muddle and flooken, but we have not yet cut the north wall; it is looking promising, but we shall see in a few days.

EAGLEBROOK.—H. Tyack, Jan. 12: We have had a favourable change in the weather. Our underground men resumed their bargains on Monday last. The cross-cut going north in the 30, and about 14 fathoms west of the cross-cut from the engine-shaft, is extended about 10 ft.; the nature of the ground passed through is a mixture of muddle and clay-slate; we have at present strong spots of lead in the present end. This cross-cut is being driven for the purpose of intersecting a lode seen going off north-west, about 5 fms. 3 ft. back from the present end of the 30. I beg to state that the cross-cut has been driven from the present end of the 30. In the 30 east the lode is large, and the part we are extending the level upon is composed of clay-slate, carbonate of lime, blende, with stones of lead and copper, and letting out quantities of water; we intend after driving a few fathoms further to cross-cut the lode south to ascertain its value.

EAST GUNSLAKE AND SOUTH BEDFORD.—J. Phillips, Jan. 7: The 54, east of Gurd's shaft, has been driven 12 fms., and we daily expect to meet with the cross-course. It must have taken a more perpendicular dip under the 26, or we should have met with it before this. The water from the end increases. The deep adit is without change. The lode in the shallow adit is very large and very kindly, but has fallen off in value, producing good stones of ore. In the rise above this level the lode is also very large, and exceedingly promising, composed of beautiful gossan and black and red oxide of copper, worth 1 ton of ore per fathom. As this shoot of gossan and ore is dipping east it must be met with in driving the end before long.

EAST POOL.—W. S. Garby (Manager), J. Maynard, A. James, Jan. 14: Great Lode: We have intersected the lode at the 170, and have driven on it 14 fathoms east; it is worth for tin 25½ per fathom. As soon as the winze is holed from the 160, which we hope to do in about six weeks, we shall commence to drive west, where the lode is worth for tin and copper 20½ per fathom. The 160 is driven west of the cross-course about 7 fms., and is worth for tin and copper 10½ per fathom. The winze opposite the cross-cut below this level is down 7 fms., and is worth 25½ per fathom. Three stopes in the back of the 160, east of the engine-shaft, are worth 20½ per fathom for each stop. The 150, east of the engine-shaft, is poor. A stop in the back, east of ditto, is worth 25½ per fathom. Two stopes in the back of the 150 west are worth 20½ each.—Engine Lode: The 170 is driven east of the cross-cut about 12 fms., and is worth for tin 25½ per fathom. The 170 is driven west of the cross-cut 9 fms., and is worth 25½ per fathom. In the back of this level is worth 30½ per fathom. The 160 is driven east of Dennis's cross-cut 20 fms., and is worth 25½ per fathom. A stop in the back of the 160 west is worth 15½ per fathom. The 150 is driven 19 fms. west of the engine-shaft, and is worth 10½ per fathom. The 50, driving east on the north branch of the south lode, is worth for copper 4½ per fathom. In the 130 cross-cut south we have not yet intersected anything of consequence.

EAST ROSEWARNE.—John James, Jan. 17: We have finished opening ground for barrow-way, &c., in the 95, and have resumed driving east and west. In the east end the lode is 1 foot wide, worth 5½ per fathom. In the west end the lode is 14 inches wide, worth 6½ per fathom. In cutting the barrow-way in this level we have met with a branch containing ore dipping towards the lode, which will apparently intersect it in about 2 fathoms sinking. This is a good feature. In the 85, west of King's shaft, the lode is 1 foot wide, improving in appearance, and producing good stones of ore. The rise over the slide in the back of the 85 east is worth 4½ per fathom. The 43 east, on the engine lode, and the 43 east of Hall's shaft, are much as last reported. The stop in the back of the 85 east is worth 10½ per fathom. The stop in the back of the 85 west is worth 7½ per fathom. The stop in the back of the 75 east is worth 8½ per fathom.

EAST ST. JUST.—J. Cartney, P. Casley, Jan. 15: We are getting on very well with the sinking of Phillips's engine-shaft below the 20. We expect in two months to be down to the 30, and extending levels east and west in tin ground, as also north and south on the Guide. The 20, which we are now driving on the Guide, has a very kindly lode, 2 ft. wide, producing a fair quantity of tin, and we have every reason to believe that at the deeper levels it will be found more productive. The 10 north, on the Guide, is looking better than hitherto—more congenial for tin. At the Cranjack, and other parts, there is nothing new to report upon.

EAST WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennett, Jan. 16: The shaftmen are engaged cutting ground for the barrow-road at the 95 before going to sink. The lode in the 95 west is from 18 in. to 2 ft. wide, and worth 1½ ton of ore to the fathom, and is letting out a great deal of water. The lode in the stopes above this level is worth 1 ton of ore to the fathom. The lode in the winze sinking below the 85 west is worth 4½ tons of ore to the fathom. The lode in the 75 east is small. We have met with another small branch of tin in the 75 cross-cut north, the ground continuing much the same as before. The lode in the stopes above the 75 west is worth 6½ per fathom. The lode in the stopes below the 65 east is worth 4½ per fathom.

EAST WHEAL LOVELL.—R. Quentrell, Jan. 16: The mine is looking remarkably well, and there is more water issuing, as we are opening west at the 60, on the south lode.

EAST WHEAL RUSSELL.—J. Goldsworthy, Jan. 16: At Homersham's shaft, sinking below the 140, fair progress is being made. In the 140, driving east of Roberts's cross-cut, the lode is from 4 to 5 ft. wide, composed of capel, quartz, prlan, muddle, and producing rich stones of yellow copper ore—a healthy looking lode, and letting out a large stream of water. In the winze sinking below the 120 the lode is from 3 to 4 ft. wide, composed of capel, quartz, prlan, muddle, and copper ore, worth 8½ per fm. In csteaning in the north part of the sett

the two lodes opened upon present a healthy and promising appearance, and no doubt will prove highly productive at a shallow depth.

FRANK MILLS.—J. P. Nicholls, J. Cornish, J. Cornish, Jan. 16: The engine-shaft is down the required depth for the tip-plate, &c., and we are now making preparations for opening the same. The east lode, in the 130 north, is yielding saying work, and looking well for improvement. The west lode, in the 130 north, has not been taken down since our last report. There is no change in the stopes in the back of this level. The east lode, in the 115 north, continues small, but it yields occasional good stones of lead ore. In the 115 north, on west lode, the ground is good, and the lode is yielding good squats or deposits of lead ore in places. The ground in the 100 north is becoming better for progress, and the lode more thickly impregnated with lead. The west part of the lode, in the 45 north, is yielding 4 cwt. of lead ore per fm., and looking well for improvement. The remaining stopes throughout the mine are much the same as for some time towards the 60 north, and without change worthy of remark. Our dressing operations and all other surface work are very much impeded in consequence of the continued severity of the weather.

FURDON.—Capt. Collins, Jan. 17: In consequence of severe frost our engine-wheel has not been regularly at work, and the water is up in the 31 fm. level, therefore there has been nothing done in the end or rise in this level since my last. The winze in the 11 east is 2½ fms. below the level. The north part of the winze is yielding good stones of ore; it is likely the lode is more north. The 11 east is being driven 3 fms. 2 ft., and will produce good stones of lead ore. We expect to discover ore going east. The stop in the back of the 11 east is being stopped close to a cross-course; we have cut through it in one place, and find a good branch of ore. We cannot see its real value until it is more laid open. The lode in the back of the stop is good, going up much the same in value as for some time. Not doing anything in dressing in consequence of frost and snow.

FURZE HILL WOOD.—W. Doidge, Jan. 17: The lode in the 54 east has improved, being now about 2 ft. wide, producing some good work for the stamps. I have set the stopes in the back of this level on tribute at 15s. In 17. The severe weather has put an entire stop to our dressing operations.

GAWTON COPPER.—G. Rowe, G. Rowe, Jan. 12: The ground in the engine-shaft, sinking below the 60, is of a good description, and our progress in sinking satisfactory. The 60 fm. level cross-cut is still going through the south capels of the lode, which is producing some fine stones of ore, and showing a very kindly appearance. The 50 east is driving on the north or flooken part of the lode in moderately easy ground. The lode in the winze sinking below this level (the 50) is 4 feet wide, worth 5 tons of ore per fathom. The lode in the winze sinking below the 50, west from old sump, is worth 10 tons of ore per fathom.

GLASGOW CARADON CONSOLS.—W. Taylor, Jan. 17: In the 73 west the ground is a little more favourable, but there is little alteration to notice in the lode; it is letting out water, with a strong appearance. In the 65 west the lode is large, with a very fine appearance, although not quite so ore as last week, more mixed with gossan, now worth 3s. 6d. per fm.; we are daily expecting this end to strike into the course of ore dipped in from East Caradon; the ground is very favourable, in proof of which we have driven about 9 fathoms in the past month, and are now making equally good progress. In the 63 cross-cut the lode is pushing on as fast as possible. The stopes for the present are not turning out so much ore.

GREAT NORTH DOWNS.—Wm. Rich, C. Bawden, Jan. 16: We have timbered King's shaft and put it in thorough good order, and have commenced to clear up the bottom, with the view to urge on the 80 west as quickly as possible. The water is being drained as we sink Sleggan's. We are sinking three winzes. No. 1, in bottom of the 75, 20 fms. west of King's, or 40 fms. east of Sleggan's, is a small branch, and is not yet so rich; this winze is being sunk at 4½ per fm. No. 2, in bottom of the 70, is 30 fms. west of Sleggan's shaft, and is worth 10½ per fathom; the lode there, and the character of the ore, is very similar to the bottom of Sleggan's, only not yet so rich; this winze is being sunk at 4½ per fm. No. 3 winze is 70 fms. west of Sleggan's, and is worth 12½ per fathom. The stop in the 70 east is worth 12½ per fathom. The 70 west is without material alteration since last reported on. The lode in the bottom of Sleggan's shaft is somewhat larger, and worth fully 50½ per fathom. There is nothing particularly new in the 70, on the north lode; the water is increasing on the lode, and very much mixed with copper; we intend shortly to precipitate the copper now in the water as it comes away from the end. We are urging on the cross-cut south at Butler's as fast as possible.

GREAT RETAILACK.—G. R. Odgers, Jan. 16: The lode at the engine-shaft, sinking below the adit, is of much the same size as we stated in our last report, producing occasionally stones of silver-lead—a highly promising lode. We cannot sink this shaft further to advantage until the engine goes to work, and the men will now commence to put in the elstern and to fix the plunger-lift, rods, &c. The lode in the adit and south is 2 ft. wide; a branch has come in from the east side and disordered the lode a little; the lode is composed of friable quartz, prlan, muddle, and stones of lead, in the same congenial killas, hence I continue to entertain a good opinion of its making an excellent run of lead under this level. The lode in the back is producing good work for lead; it being so near the surface it is patchy. The lode in the north end is 2½ ft. wide, composed of quartz and gossan, with cubes of lead and muddle; altogether, as promising a lode as can be seen for the depth. We have not been able to do much towards the building of the engine-house this week, everything being frozen up.

GREAT SOUTH CHIVERTON.—J. Nancarrow, J. George, Jan. 15: Gifford's shaftmen have in the past week made fair progress in sinking, and will commence cutting a pit in the 30 to-morrow. They will also sink a fork at the same time, as we have put on four additional hands. The ends in the 20 look very promising for lead.

GREAT SOUTH TOLGUS.—J. Daw, Jan. 16: Friday last was setting-day. In the 140, east of new shaft, the lode is 1½ ft. wide, producing good stones of copper ore; set to six men, at 6s. 10s. per fm. In Noel's shaft, sinking below the 125, the lode is 1 ft. wide, producing from 2 to 3 tons of ore per fm.; sinking by six men, at 12s. per fm. The lode in the 125, east of Noel's shaft, is 1 ft. wide, producing stones of ore, but not enough to value; driving by four men, at 5s. 10s. per fm. Owing to the recent heavy falls of snow and rain the water has very much increased, and at this time it is rather more than the engine can keep; by this increase of water we were enabled to set the 166 east on Friday last; also the pitches below the 154 are suspended by the water.

GREAT WHEAL VORINTED.—T. Julian, S. Harris, J. James, Jan. 16: We are progressing favourably both in driving the north and south cross-cuts at the 204, but have not yet reached any lode. We have, however, passed through a small branch, underlying north, in the north cross-cut, which encourages us to hope the main part is not far distant. In the 194, driving west, we have a good improvement; the lode is regular and well defined, with a decided change in the ground for the better, is 2 ft. wide, and producing tin; we are daily looking forward to further improvement as we approach the No. 3 winze, which has been sunk from the 184 through rich tin ground nearly as deep as the 194. In stripping down the south branches in No. 3 winze below the 184 we find them composed of very small, but containing rich tin. The lode in the 184, east of the 184 east, is 2½ ft. wide, worth 25½ per fm.; this rise is going up through an important piece of ground, and will open out a large quantity of profitable ground. The 174 east is worth 30½ per fm.; the lode is becoming more easy for driving through. The south lode, in the 152, is 2½ ft. wide, producing good stones of copper. The lode in the winze sinking below the 174, east from Ivey's, is 2 ft. wide, worth 15½ per fm.; all the stopes in this part of the mine are looking well. Ivey's shaft is sunk about 14 fms. below the 174; for the last 6 feet sinking the ground has improved; we shall, when the shaft is squared down, commence driving east-west on the lode, and cross-cut away as before proposed. The lode in the winze sinking below the 174, west from shaft, is 18 inches wide, worth 16½ per fm. The lode in the 174 west is 18 in. wide, worth 15½ per fathom; this end has much improved; the country about the lode contains numerous branches, producing tin, as in the two levels above. The lode in the 162 west is very large and well defined; we are, therefore, driving the end on the north wall, which contains a great number of regular branches of tin, worth 20½ per fm.; we propose going through the lode in a little further driving west. The lode in the 157 west is also very large and wet; we are, therefore, driving in it, as in the 162 below, with the same results. The winze sinking below this level communicates with the 162, is worth 20½ per fm., and contains the same channel of ground as the ends. The lode in the stopes in back of the 162 is very rich, and the ground on the north contains similar branches; we can see, therefore, we are in this part of the mine opening up a large quantity of rich tin ground. All the stopes in this part of the mine are looking very well, and yielding their usual quantity of tin. On the whole, we have much improved in the past month, and our present prospects are such as will justify us in a strong confidence of greater improvements in the coming month. The rods in the 147, and pitwork in the both shafts, are working well and in good order. We are progressing very favourably in the sinking of Edwards's shaft; the ground is everything we can expect for the production of tin, and there can be little doubt but in depth the lode will be very productive. The surface rods are working well. The stands and pulleys are fixed for drawing with the engine at this shaft, but not completed. The weather being so severe the past week we could do little or nothing of out-door work. We should have gone with the tin in time for the meeting but for the severity of the weather; we have, however, got it in sacks, and if possible, weather permitting, shall sell it to-morrow; it weighs a little over the quantity now fixed per month—51 tons. The whole of the machinery is in good working order.

GUNSLAKE (CLITTON).—W. Skewes, J. C. Seccombe, Jan. 17: The lode in the 23 is at present unproductive. The lode in the 12 west is considerably improved, and worth for grey and yellow copper ore from 12s. to 15s. per fm., and from all appearances it will be found to be much richer below this level. The stop in the back of this level is worth from 15s. to 18s. per fm. The 23 will be extended on to reach this ore ground with all speed.

GWYDYR PARK.—Wm. Smyth, Jan. 15: In the north end, in Gwyn Liffon adit, the lode is from 3 to 4 ft. wide, of spar, muddle, blende, and spots of lead ore; it is very hard and slow to drive in, I have put the men to cut into the footwall under it, and the ground does not seem so hard; there is no wall on the lode, and the ground is very hard at the hanging side. From the appearance of the ground in the west end I expect we are near some change; the lode is still disordered.

HALLENBEAGLE.—W. Bawden, Jan. 12: We have taken down a little of the lode in Piniger's shaft, it is producing good stones of copper ore. In the 56, east of Stone's shaft, the lode is 18 in. wide, worth 5½ per fathom. In the 47, east of said shaft, the lode is 1 ft. wide, producing good stones of copper ore. The 55 fm. level cross-cut, north of Piniger's shaft, is without change to notice. Reed's shaft is sunk to the 63 fm. level; and shall to-day set to drive east and west of same at the said level. In the 53, east of Reed's, the lode is 1 ft. wide, containing a little ore. In the 53, west of said shaft, the lode is 2 feet wide, worth 6½ per fathom. The speed of our engine is eight strokes per minute.

HARWOOD.—J. Race, Jan. 11: There is no alteration in the level going east in the north string worthy of notice. Stop No. 1 is worth 1½ ton of ore per fm. Stop No. 2, 1½ ton of ore per fm. Stop No. 3 is worth from 1½ to 2 tons of ore per fathom. Stop No. 1 west is worth about 8 cwt. of ore per fm. The drift going east in the south branch of north string is worth 6 cwt. of ore per fm. The level going east-west on the lode is looking better, and likely to improve. They are getting on well with opening out the old level. All out-door works are stopped by the snow.

LADY BERTHA.—J. Metherell, S. Harpur, Jan. 17: The lode in the 41 fm. level, driving east, is about 3 ft. wide, composed principally of quartz, muddle, and ore, worth of the latter 2 tons, or 6s. per fm., and letting out a little water. No lode has yet been taken down in the 36 east. The water is still very strong. Owing to the very heavy fall of snow and the frost, we have not been able to draw from either of the levels.

LEAWOOD.—J. Daw, Jan. 17: The 40 north is still a very kindly end, being our setting and pay on Saturday, Capt. Nicholls will be here. A full report shall be sent.

LOVELL CONSOLS.—Wm. Chappell, Jan. 17: The lode in the 12 west continues to be of a very kindly nature, and producing good stones of tin, letting out a great deal of water, and from the appearance of the country we are getting back near the great cross-course, to the west of which the former workings raised a large quantity of tin in back and bottom of the adit level. The men are making better progress in driving the cross-cut north under the perpendicular shaft; we have 5 ft. more to drive, when we shall be able to raise and sink, and when holed we shall be able to set several tribute pitches in the back of the 12, and continue the cross-cut north to cut Trevenen north lode. The engine is working well, and keeping the water with ease.

MINERA UNION.—W. T. Harris, Jan. 17: Douglas's Shaft: The ground is without alteration. The water is rather quicker than last report. We have yet 6 yards to sink to the 60 yard level at Brabner's shaft, when we shall communicate. The ground in the 40 cross-cut contains more lead, and is very promising.—Brabner's Shaft: The stopes in back of the 60 yard level north are yielding good stones of lead, and improving as we go up. The lode in the end is without alteration. The same may be applied to the ground in the 89 yard cross-cut. The lode discovered in the big cross-cut is worth 10 cwt. of lead per fathom. All other points as last reported.

MOLLAND.—T. Bennett, Jan. 16: We have done nothing towards extending the 73 east during the past week. The men have been engaged in cutting in the north part of the lode, where we find it is composed principally of quartz associated with spots of grey ore occasionally; we are now in about 2½ feet in the north part, and no sign of meeting with the wall of the lode shortly; however, we do not meet with it in the course of a day or two we shall resume driving east as before in the ore part of the lode. In the winze sinking below this level we have not yet met with the counter part of the lode, which I am now inclined to think is heaved a little to the south; we shall, therefore, gain the winze (which we intend sinking for a fork) in that direction. The weather is again set in very severe, so that nothing can as yet be done in the dressing department, not being able to get hands to come this weather.

MOUNT PLEASANT LEAD.—W. Wasley, J. Edwards, Jan. 17: After taking the management of the above mine on May 12, last year, I made different alterations in the mode of working. I stopped all the stoping on tutwork, and put on tribute; and finding that the ventilation of the mine was not good, I put two pairs of men to drive with all possible speed to communicate the workings with Bright's shaft. Thinking, then, that the level at Bright's shaft was deeper than the workings from the boundary shaft, I levelled the ground, and made section of the mine, which showed that the level from Bright's shaft was deeper than the workings from boundary shaft by over 7 yards; I, therefore, stopped the driving from Bright's shaft, and put the men to rise in the back of the end, and so, in about four weeks, got the mine thoroughly ventilated, which enabled the men to work much better than they could be expected to do before in places 300 yards and over from draught. Since then we have opened 117 yards of new ground, by driving levels, sinking winzes, &c., and done a great deal of work, repairing shafts, altering footways, &c., and have raised and sold 62 tons of lead ore. Being of the opinion that good runs of ore might be found under the old workings, we got a whim erected on Jenkins's shaft, which is situated just in the middle of the set, and got the shaft cleared and divided, and footway put in to the bottom, which is 80 yards from the surface, and have sunk the shaft 5 yards below the level. The ground in the shaft is a hard limestone, but we think it will soon get easier, and that in about seven or eight weeks' time we shall get down on another run of ore, and have four men driving between the boundary and Bright's shafts, and an improvement in the ground, and two men working on tribute to the south of Bright's shaft. We think all who knew about the expenditure and returns before we took the mine cannot but be well pleased with the results of the last eight months' working.

NANGILES.—J. Rowe, Jan. 17: The 130 is driving west of the engine-shaft by six men, at 7s. per fm.; lode poor. We have 4 fathoms more to drive to get under the place where the lode began to make ore in the 120. The lode in the 120 has not been so good the last fortnight; the last taking down was worth 14 ton to a fathom. To-day there are good signs of an improvement in the ground, by driving levels, sinking winzes, &c., and have raised and sold 62 tons of lead ore. Being of the opinion that good runs of ore might be found under the old workings, we got a whim erected on Jenkins's shaft, which is situated just in the middle of the set, and got the shaft cleared and divided, and footway put in to the bottom, which is 80 yards from the surface, and have sunk the shaft 5 yards below the level. The ground in the shaft is a hard limestone, but we think it will soon get easier, and that in about seven or eight weeks' time we shall get down on another run of ore, and have four men driving between the boundary and Bright's shafts, and an improvement in the ground, and two men working on tribute to the south of Bright's shaft. We think all who knew about the expenditure and returns before we took the mine cannot but be well pleased with the results of the last eight months' working.

NEW CROW HILL.—W. Trelease, Jan. 15: We are in for a long all through, but nothing was done underground last week. All, however, is now again a full operation, except that the frost is still very severe.

NEW EAST BIRCH TOR AND VITIFER CONSOLS.—W. Skewes, R. T. Varthen, Jan. 16: In turning and driving the deep adit end towards the 60 level we have a great increase of water, and before driving further we purpose boring forth in the breast of the end, to see if we can hole and let down the water, and, if so, we shall then be able to make greater progress in reaching Pindeux's shaft.

NEW PEMBROKE.—F. Puckey, J. Puckey, Jan. 14: The engine-shaft is sunk about 5 fms. below the 60; the ground in the shaft is still favourable for progress. In the 60 cross-cut, driving south, east of engine-shaft, we have intersected two or three small branches, but not of any value. We have commenced to sink a winze below the 60, east of shaft, to take down the good branch of copper we drove through at that level some few months since. We have three stopes working in the back of the 60, west of shaft. In the western stopes the lode is 2 ft. wide, composed of friable quartz, prlan, and the worth for the plate 8½ per fm., and looking promising for improvement. In the middle stopes the lode is 2½ ft. wide, worth 10½ per fm. In the eastern stopes the lode is 2½ ft. wide, worth 9½ per fm. The cost for working each of the above stopes is 4s. per fathom. In the stopes in back of the 45, west of shaft, the lode is disordered in consequence of having intersected a small slide; the lode at the present time is only producing low quality tin stuff. In the 45 cross-cut, driving south, we are of cross-course, the ground is favourable, the present price for driving being 4s. per fathom. In the 30 cross-cut, driving north of engine-shaft, there is a change to the silver-lead during the past month.

NEW TAMAR SILVER LEAD.—J. Phillips, Jan. 17: There is still a good change of rich silver-lead ore in the 10, driving south, and from the appearance of the lode and the country in which it is embedded, I have not the least doubt but that when the end is advanced a few feet further we shall have a good paying lode at this point. The lode in the rise in the back of this level is not looking so well as when last reported on, it being evident we are just on the top of this shoot of ore. Therefore, as there is a good lode gone down in the bottom of this level (the 10), I deem it advisable to suspend operations here, and commence sinking the shaft with all speed, so that we may at an early date possibly begin to drive another level south at the 29, in which there can be no doubt but that great success will be met with. As soon as the bottom of the shaft (which is under the 10) is cleared up, I will let you know the size and character of the same.

NEW TRELAUNY.—E. H. Dingle, Jan. 17: The engine-shaft is down 29 fms. from surface. Our progress for the last few days has been rather slow, the lode being large, and letting out a deal of highly mineralised water; the lode is 3 feet wide, producing large quantities of muddle, peach, prlan, and quartz yielding rich stones of black and yellow copper ore; for the last 6 feet sinking the work is a prettier lode can be seen, and is fully expected to be a great improvement in sinking the next 6 ft. I hope, all being well, to get the shaft 30 fms. 3 ft. from surface by the end of this month, when I propose to drive east and west on the course of the lode at the 30, where I expect to open up paying ground, leaving 3 feet in the bottom of the shaft as a fork. Our object in driving this level is a two-fold one; in driving about 30 fms. west we hope to reach the lead lode, and in driving about the same distance east to reach a magnificent elvan course; at these two points we may fully expect good deposits of mineral, whilst at the same time we shall be opening up ground that will be taken away on tribute, and leave a fair profit if the lode continues to be as good in the shaft. I intend to continue sinking the engine-shaft so as to make a 45 fm. level, and at that depth, if the lode continues to improve as it has done for the last 6 ft., we shall have one of the best young mines in the county. The dressing is at a standstill, the weather being so very severe.

NEW TRELEIGH.—S. Michell, Jan. 16: The lode in bottom of the new shaft is improving as it goes down; it is 4 ft. wide, and very wet. The 60 end west in the slide, and at present unproductive. A stop in the back of this level above the slide, will produce over 2 tons of ore per fm. A stop in back of the 51, west of shaft, will turn out 1½ ton per fm. The lode in the 51 east is 2½ ft. wide, yielding good stones of ore a kindly end. A stop in bottom of this level is worth 2 tons of ore per fm. The stop in bottom of the 60, east of the shaft, will produce fully 3 tons of ore per fathom. The lode in the 40 west is producing stones of ore, and apparently altering for the better. The weather is making against surface work. We have now a very heavy fall of snow on the ground, such as has not been seen in Cornwall for many years.

NEW WHEAL TOWAN.—R. Pryor, Jan. 16: We think we have cut through the counter lode, and find it 3 feet wide, composed principally of muddle, and rich yellow copper ore intermixed (say) worth of the latter about 1 ton per fm. and likely to improve as we begin to

wine, have become unproductive, and east are worth about 1½ ton in a fathom of this unprofitable ore. The Guadalupe level was being cleared up and made secure, and a plank-road put under the two lifts in Cornubia engine-shaft, from San Alfonso to Guadalupe, so that in any future day the lifts may be taken away under water, or the working resumed without difficulty. In San Alfonso deep adit level, driving east, the great cross-course has been intersected. The lode

CHONTALES.—Wm. B. Paul, Dec. 4: Consuelo Mine: During the

VAL SANAM. Captain I. Rickard, Jan 8. During December the Usera works have made very good progress, and I am glad to be able to say that the end of the upper and lower calcina galleries have improved since last report. They seem very likely before long to regain their former richness. We intend just now to make a start again in driving the Delpozzo gallery. The tribute sampling for the take of November and December has amounted to nearly 7 tons, and from appearances we may expect 10 tons for the present take. The rate of

tribute averages about 68. In 11. The dressed ore now ready for exportation is nearly 7 tons, of which we shall forward particulars in a few days. If we are not hindered by the severity of the frost, we shall send off a similar quantity at the end of the present take. Dressing since the beginning of the year has been extremely difficult, indeed, at times impossible; but we are not without the hope of being able to work a part of the time through the month.

NEW WILDBERG.—**Jas. Sanders, Jan. 12:** Carter's shaft: In consequence of the water being still in the 90 lachter level, nothing has been done there for the past week; in this part of the mine there is, however, an improvement—there is now a leader of ore 1 in. thick, and upon this a second band 12 in. thick, spotted with ore. The 80 lachter drirage, west of Davey's stopes, remains still worth $\frac{3}{4}$ ton of ore per lachter. The stopes above the level east and west of winze are worth 2 tons per lachter. The 80 steelsone cross-cut is extended 6½ lachters:

The ground being composed of grauwacke and steel-tone, with small bands or joints of schiefer occasionally, but at present unproductive of ore. The driftage west towards the steelstone cross-cut is very hard, yielding occasionally stones of ore. The 70 driftage west, to come under the Erbstiftstergang erz-kammer, is composed of schiefer, steelstone, and quartz, with stones of ore occasionally. The tribute pitch below the 60, west of No. 2 sink, remains worth 1 ton of ore per laecher; this part of the lode appears to be still standing in the footwall of

The old workings,—Michael's shaft: the 70 west is composed entirely of grava-
wacke but the south side of the driftage appears to be getting a little easier for
driving, and we hope to get a change for the better shortly; this driftage is occasion-
ally yielding stones of ore. The cross-cut north remain as last week.—Beck's
Workings: The lode in the 70 east is composed of schiefer and quartz, but is un-
productive of ore at present. Floods of snow and rain continue. The water is
still above the 30. We are working night and day to take up the water in the ad-
dit. The launders are all made, and a great many of them fixed.

CENTRAL AMERICAN.—Alotepeque, Dec. 1: In San Carlos Mine the operations have been carried on during the past month with regularity, and Capt. Butler is unable to report much change. In Cerna's deep adit cross-cut, driving to cut Carrara's lode, 18 fathoms below La Esperanza level, the ground has continued hard, and the driving has been limited—4 fms. 0 ft. 9 in. A little change for the better in the ground for driving has now taken place, and in the end of the cross-cut are two small branches, with increase of water, indicating

the nearing a lode. In the deep adit, on the north lode, driving also to cut Carrera's lode, at about the same depth as Cerna's, the lode is 2½ ft. wide, composed of flookan, calc-spar, and soft porphyry, with a little increase of water; 9 fathoms have been driven in November, and if the ground continues favourable the lode will be intersected at an early date, when it is to be hoped that this deep level will drain Carrera's lode, so that productive ground may be opened out under La Esperanza level. The slopes above San Rafael level are become unproductive throughout, but two men are still engaged in driving a

small level from the topes cast into a piece of ground, where it is hoped to meet with some pockets of ore that will pay. The topes above La Esperanza adit level are now all communicated with one another, from Mateo's winze through to the topes east and west of Mistun's rise, and also with the topes east of Garcia's winze. The lode about Mistun's rise has a little fallen off in produce in the past month, but the topes east of Garcia's winze are somewhat improved. The lode is worth on an average about 1½ ton per fathom. The returns for the month will be about 100 tons.

stowaway will be about 25 tons, with 40 Capt. Butler hopes will yield 18 to 20 ozs. of silver.—San Juan Mine: The lode in San Andre's adit level, driving east of the gully, on Aguacate lode, is 1 foot wide, composed of flocon and soft porphyry. In November the level was advanced 7½ fathoms, and has at intervals produced some silver ore of good quality, but leaving no backs, as the top of the present level is passing along just with the bottom of the old men's workings. Martinez's winze has been sunk below San Andre's adit 23 feet, and is stopped, owing to the influx of water. The lode in the bottom of this winze is small and un-

productive, and underlying south 2 feet in a fathom. The stopewest of Martinez's winze has yielded but little ore, whilst the stopes east has given some silver ore of fair quality, but these stopes are now unproductive. A new winze, called Maddaford's, to be sunk under San Andre's level, by four men, will be sunk $4\frac{1}{2}$ fathoms further east than Martinez. Some good stones of ore have been broken from the lode where it will be commenced ; it is hoped we shall get some good ore from this winze, and to be able to open out good stopping ground. Capt. Butler hopes, that the new winze will be able to stop out the lode.

Large blocks of silver-bearing returns from this young mine for November will amount to 400 ozs. of silver. A cross-cut can be brought in to intersect the Agnate lode, 89 feet below San Andre's adit level, but Captain Butler thinks it will be well first to sink one, two, or three winzes on the course of the lode at different points as deep as practicable, in order to ascertain the nature and quantities of the lode, and he expects to reach a depth of 10 or 12 fathoms in the dry season. There is another known lode further south than the Agnate lode, and should the latter prove productive, Capt. Butler considers it will be a good

San Pantaleon Mine: In Guadalupe level the lode is $2\frac{1}{2}$ feet wide, composed of porphyry, flookan, and calc-spar, with a little bledin, much corrupted with arseniuret of manganese, which cannot be treated by barrel amalgamation without great loss of mercury; and as it is impossible to raise any ore without a large portion of this arseniuret of manganese, it has been decided to suspend the driving of the level and the working of the lode, which is the best of them.

wine, have become unproductive, and east are worth about 1½ ton in a fathom of this unprofitable ore. The Guadalupe level was being cleared up and made secure, and a plank-road put under the two lifts in Cornubia engine-shaft, from San Alfonso to Guadalupe, so that in any future day the lifts may be taken away under water, or the working resumed without difficulty. In San Alfonso deep adit level, driving east, the great cross-course has been intersected. The lode

continued from 1 to 1½ foot wide, close up to the cross-course, but without ore, and is clearly seen to turn with the cross-course to the right hand, so that Capt. Butler is confident of the heavy bed to the right hand. The level has been continued 41 feet into the cross-course, which is composed generally of blue, grey, and purple porphyry, with a little decomposed carbonate of lime, and is thought to have nearly reached its eastern side. Capt. Butler considers that the heavy will not be less than 70 fathoms, and that before cross-cutting it will be more economical to spend a few dollars more in the eastern ground southward during the present dry season, feeling confident that any lode or vein in the vicinity of the great cross-course will be found cropping out at the surface, the rock being a very pretty, white, unstratified porphyry. The estimated raisings for December are—From San Carlos, 23 tons; and San Juan, 4 tons; total, 27 tons, which, at an average of 70 ozs. of silver per ton of ore, will produce 1890 ozs. The 33d conducts returned safely to the mines on November 24, and another remittance of about \$6000 was expected to be ready early in January.

FORTUNE COPPER (W.A.).—Nov. 28: We have dressed this month 75 tons lead ore, of from 75 to 80 per cent.; and 5 tons copper ore, of from 17 to 18 per cent. Mr. Lionel Samson advises the shipment of 150 tons of lead ore per Palestine, 200 tons per Fitzroy, 200 tons per Bridgetown and per Kestrel, to Sydney for transshipment to London 120 tons; total, 670 tons of lead ore.

CHONTALES.—As will be seen by the report of the manager (which appears in another column), the mine operations are progressing satisfactorily. No gold has been remitted; a remittance may, probably, be expected next month, but regular remittances can scarcely be relied upon, until the machinery and appliances are in a position to grind and dress the ores now available. The commissioners deem it much more important at present to employ a large force of men to expedite the building of dwellings and completion of roads, so that returns may be made more expeditiously, as well as more economically. Considerable advance has been made in the works, and it is expected that some portion of the new machinery will be ready to go to work in the course of two months from this time. The commissioners, in their investigation, have found it necessary to dismiss two of the company's officers at the mines. The establishment now works harmoniously and more effectively. The health of the commissioners, officers, &c., is satisfactory.

WHEAL KITTY (St. Agnes).—This productive tin mine has continued to make profits during the low price of tin, and throughout the fearful depression in mining. A rise of 7½ per ton in tin has caused a great increase in the market price of most tin mines; several having gone up 10 per cent. in value. Tincroft, under the same able management as Wheal Kitty, has risen in value from 7½ to 14½, yet Wheal Kitty has hardly been noticed. At the last meeting a balance of nearly 5000l. profit was carried over, and at the meeting to be held in February a sum of nearly 10000l. will be available for a dividend. The agents report they have a fine lode in Pryor's shaft, 7 feet wide, sinking below the 60; the ends are looking well, and good reserves being laid open. Surely, with these facts before the public, the mine at present price is a safe investment.

GREAT NORTH DOWNS.—(From a Truro Correspondent).—This property, which is now beginning to again attract the attention of the mining public, was known between the years 1718 and 1758 as one of the most profitable mines in Cornwall; and at about the beginning of the present century some slight attempts were made to re-open the old workings, but the outlay necessary proved an insuperable obstacle. One of the many favourable features for which this mine is peculiar is that its western portion is traversed by the great cross-course, known to miners as "The Father of Ore," the run of ground on the course of the lode is between 500 and 600 fms. in length, the lode varying in size from 7 to 20 ft., and in some places even wider. It may be termed an east and west lode, underlying south towards a bed of granite, on which in depth, so to speak, it rests; it is strong and masterly in its character, passes through various cross lodes, and in depth will fall into other lodes. Channels of elvan pass through the sett, which, in fact, forms part of the reputed district of Carnborne, Redruth, and Gwennap—the richest yet discovered. It is needless here to refer to the well-known fact that this district has been for centuries famed for its mineral wealth, producing large fortunes to persevering adventurers, and that the lodes, after due exploration, amply repay for the expenditure of capital. Suffice it to say, quoting the words of an authority upon this point, "that the history of this mineral field is the history of enormous wealth, won by patient labour and a judicious expenditure of moderate capital." Looking at the mineral conditions in which such profit abounded, it will be found that Great North Downs is of precisely similar conditions, and provided similar means be adopted, similar results will be realised. One of the important points of operation is the sinking of Sleggan's shaft, where there is a lode for the length of the shaft worth from 500 to 600 per fm. The levels west tell of a long run of ore ground, which, according to the opinion of every practical miner, will hold home to the "Father of Ore." The levels going east will soon be in highly productive ground, as is proved by the ore ground now working in Wheal Rose. Sleggan's engine is a powerful 70-hp. cylinder, and a powerful 80-hp. is on Vivian's shaft. The latter, however, is not at present working, but with increased depth at Sleggan's its use may be required. There are also upon the mine two steam-whims, a crusher, and steam capstan. Ample provision is made for many years to come to meet every requirement in the shape of draining, drawing, and dressing. As to the eastern part of the mine, it may be mentioned that the hard bar of ground has been passed through, and the workings have just reached the back of a new run of ore, the development of which the manager regards as one of the substantial certainties of the mine. In reviewing the general prospects of Great North Downs, no geological or analogical doubt can be entertained that it will prove a great and permanently remunerative mine, successfully vying with those rich old mines that have established the character of this favoured district.

MINING, AND ITS PROSPECTS.—(From Mr. Peter Watson's "Weekly Mining Circular and Share List," No. 407, vol. ix., Friday, Jan. 18).—"It is highly gratifying to find that the anticipations have been so strikingly confirmed with respect to the general advance that has taken place in the Stock and Share Markets, more particularly in the value of shares in Cornish and Devon mines. The active and increasing demand which has sprung up during the past few weeks for shares in good dividend and progressive mines has been stimulated by the large purchases effected by the public, who at last appear to be awakening to the importance of securing an investment in mines before the values advance to such an extent as to leave a comparatively small margin for profit, as far as the market price is concerned. Since I directed attention to the desirability of effecting purchases, now about six weeks or two months since, the price of tin has advanced something like 7½ or 8½ per ton, and about 10½ in the standard of copper ore. This week the standard has again advanced, and it is expected that in the course of a few days a further rise in the price of tin will take place. Important improvements have also taken place in several mines. Whether, as regards the position of the labour market in Cornwall, or the price at which all descriptions of materials and machinery can be obtained, no opportunity more desirable than the present could exist for the re-working of proved good tin and copper mines which had, before, to temporarily succumb to the unprecedented depression in the metal market, from which we are now happily emerging."

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

PRINCE OF WALES.—As far as seen, the lode in the 55 is worth about 150 to 200 per fm.—the lode has not yet been cut through. There is every indication that it will be found richer than in the level above. Drilling will be at once commenced. This is one of the most important discoveries in the eastern part of Cornwall.

GREAT WHEAL VOR.—There has been cut a branch in the 204 south 4 in. wide, and containing some good stones of tin. It is underlying south about 2 feet in the fathom.

DRAKE WALLS.—Owing to the advance in the price of tin this mine will soon again enter the Dividend List. The important discoveries in the Prince of Wales Mines, the lodes of which traverse the Drake Walls and West Drake Walls setts, has, naturally enough, attracted considerable attention to the latter setts.

GUNNISLACK (Clitter's) MINE is likely very soon to become the centre of attraction. The good ore ground now opening out below the adit level is satisfactory and encouraging to those shareholders who have invested a large amount of capital in opening up the mine so far, and in the necessary machinery and appliances for working. The end at the 12 west below the adit is driving in a lode of copper ore, worth over 100 per fm., with every indication of important improvement. The slope in the back of this level is worth fully 150 per fm. There is an end driving west at the 23, on the same lode, which will, in no great while, get under the ore ground driven and driving through at the 12 fm. level.

BELSTONE CONSOLS.—We understand that the main lode has been cut in the 30, and is worth at that depth not less than 500 per fm. This mine was a virgin piece of ground less than two years ago, when Mr. J. Calvert highly recommended the spot, and induced his employers to allow him to prove it, and before a single sod of ground was touched that gentleman valued the site at 100,000l. The discovery of this lode is the first piece of corroborative evidence, and the further development of the mine will assist in giving value to the statement of Mr. Calvert, that there are many valuable mines yet untouched (virgin ground) both in Devon and Cornwall.

WHEAL TRANNACK is looking much better: in the 10 fm. level, driving west, the lode is 4 ft. wide, composed of spar, capel, mundle, and yellow copper throughout the lode—we expect a daily improvement. In the 20, which is about 8 or 10 fathoms behind the 10, there is a very promising lode, from 3 to 4 feet wide, and we expect a daily improvement, as the ground is changing for the better; the lode is composed of spar, mundle, and copper, but not to value.

OKEL TOR.—The large lode intersected in the 50 fm. level cross-cut east still continues to yield 8 tons of copper ore per fm., besides mundle, to the value of 41. This fine course of ore has been just cut in the 65, where it will produce 5 tons of good ore per fm., and it is expected soon to be cut in the 80 fm. level cross-cut south. The important feature connected with this discovery is that it has occurred on an independent lode, south of the one hitherto worked on, and appears to be composed of a much superior quality of ore, and has the facility of being stopped westward from the old workings.

PENHALE WHEAL VOR is improving, and as the lodes passing through the sett have produced large quantities of tin from the mines adjacent, as well as in this mine, it is evident a valuable and rich one is gradually being opened up; and taking into consideration the cutting of Penhale lode in the two cross-cuts, and the new lode discovered in the 24, south of Battye's shaft, which is turning out to the expectations of the agents, there is every probability the mine will in a short time be equal to its rich neighbour, Great Wheal Vor Wheal Metal, which are parallel lodes, and adjoining mines. I believe they will sell about 7 tons of tin in the course of a few days.

With next week's Journal we shall publish, as a Supplement, the TITLE-PAGE AND INDEX to the THIRTY-SIXTH VOLUME of the MINING JOURNAL.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JAN. 18, 1867.

COPPER.			IRON.		
	£	s. d.		Per ton.	
Best selected.....per ton	89	0 0	Bars Welsh, in London	6 7 6-6 10 0	
Tough cake and tile	86	0 0	Ditto, to arrive.....	6 10 0	
Sheeting and sheets	91	0 0	Nail rods.....	7 0 0-8 0 0	
Boils.....	81	0 0	Do., Staffd. in London	7 15 0-8 10 0	
Bottoms.....	96	0 0	Bars ditto	7 15 0-9 10 0	
Old (Exchange).....	77	0 0	Hoops ditto	8 15 0-9 15 0	
Burra Burra.....	85	0 0	Sheets, single.....	9 10 0-11 0 0	
Wire.....per lb.	0 1 0½		Pig No. 1, in Wales	4 5 0-4 10 0	
Tubes.....	0 1 0		Refined metal, ditto..	4 0 0-5 0 0	
BRASS.			STEEL.		
	Per lb.			Per ton.	
Sheets.....per lb.	10d.-		Do. mch. Tyneor Tees	5 10 0-6 0 0	
Wire.....	9d.-		Do., railway, in Wales	5 5 0-5 10 0	
Tubes.....	11d.-		Do., Swed. in London	5 0-10 10 0	
SPELTER.			QUICKSILVER (p. bottle)		
	Per ton.				
Foreign on the spot.....	21 17 6		Do. Nos. 3, 4, f.o.b. do.	2 6 0-2 7 0	
Do., to arrive.....	22 5 0		Railway chairs.....	5 10 0-5 15 0	
ZINC.			INDIAN CHARCOAL PIGS.		
	Per ton.				
In sheets.....	28 0 0		In London p. ton..	7 0 0-7 10 0	
TIN.			LEAD.		
	Per box.			Per ton.	
English blocks.....	90 0 0		English Pig, com.	20 0 0-—	
Do., bars (in barrels)	91 0 0		Ditto, ordinary soft..	20 5 0-20 10 0	
Do., refined.....	93 0 0		Ditto (WB).....	22 15 0-—	
Banca.....	89 0 0		Ditto, sheet.....	21 0 0-—	
Straits.....	86 10 0		Ditto, red lead.....	21 10 0-—	
TIN-PLATES.*			IRON.		
	Per box.			Per ton.	
IC Charcoal, 1st qua.	1 12 0-1 13 0		Do. mch. Tyneor Tees	5 10 0-6 0 0	
IX Ditto, 1st quality	1 18 0-1 19 0		Do., railway, in Wales	5 5 0-5 10 0	
IC Ditto, 2d quality..	1 8 0-—		Do., Swed. in London	5 0-10 10 0	
IX Ditto, 2d quality..	1 14 0-—		Pig No. 1, in Wales	4 5 0-4 10 0	
IC Coke.....	1 4 6-1 6 0		Refined metal, ditto..	4 0 0-5 0 0	
IX Ditto.....	1 10 6-1 12 0		Do. mch. Tyneor Tees	5 10 0-6 0 0	
Canada plates, p. ton.	13 10 0-—		Do., railway, in Wales	5 5 0-5 10 0	
Ditto, at works.....	12 10 0-—		Do., Swed. in London	5 0-10 10 0	

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The Metal Market during the past week has continued to present an appearance of considerable activity, and a very good amount of business has been done. Several speculative transactions have also occurred, and the market shows every prospect of resuming a satisfactory position; and, as the year has opened in so favourable a manner, we may augur propitiously for the future, and sincerely trust that our anticipations may not be disappointed. The position of one or two metals especially (the prices of which have recently been lower than has been known for a long time past) is very encouraging, and is such that there is good ground to hope that parties who formerly engaged in speculative operations in them with considerable loss may now have an opportunity of recovering some of that loss, and be enabled to operate with much more satisfactory results. In one of them particularly there has been this last week a very lively market, and numerous extensive transactions have taken place; and, though towards the end of the week there has been more quietness in the market, yet we may anticipate that activity will soon again return, and a still further advance in prices occur. The accounts from America with reference to the impeachment of the President are of so conflicting a character that little dependence can be placed in them; still we fear that party spirit is so strong that something hostile to the President will be attempted, with what success remains to be seen.

COPPER.—After having existed for a number of years, the Copper Smelters' Association has at length been broken up. The cause of this is best known to the Association itself, but probably it was found that some of the members persisted in selling under the official prices; at all events, the monopoly is now at an end, and we sincerely trust that it may never be re-established; all monopolies are bad, and this has been no exception to the rule. Each of the smelters will now stand by himself, and will do the best for his own interests, and we have no doubt that the trade generally will be much benefited by the change. The market has been rather quiet during the week, and transactions have not been very extensive. Several small sales of Wallaroo have been effected at 85½ to 85½ 10s. cash.

IRON.—In Staffordshire the reduction of prices has not yet had any marked effect in inducing orders to be given out, and, in point of fact, the whole trade is waiting for the decision of the men, whether they will accept the reduction of wages or strike. Meetings of the workmen were held on Monday, when the puddlers at Brierley Hill determined to resist the reduction of wages; on the other hand, the millmen at West Bromwich resolved to submit conditionally. This shows that the men are divided among themselves, and probably after all there will be no strike. In Welsh the trade continues very quiet, but it is hoped that the assimilation of the list prices to those actually accepted will be the means of creating a stimulus in the home demand. It is also satisfactory to find that a feeling of confidence is beginning to gain ground, and this will greatly tend to improve the condition of the trade. The ironmasters in Wales appear to be waiting to see the result of the reduction of wages in Staffordshire, and should it prove successful will, no doubt, give the necessary notices at the end of the present month. The exports are on an average, most being cleared out for the United States. In Swedish iron the demand is again more active. In Scotch pig the amount of business during the week has been by no means extensive, and the fluctuations have been only trifling, rising to 54s. 9d. cash, and then again declining to 54s. 6d. cash, which is the last price received from Glasgow.

LEAD.—The market remains quiet, but prices have undergone no change.

TIN.—In English the advance announced in last week's Journal should have been 3½ per ton instead of 2½; present prices are, therefore, 90½ for block, 91½ for bars, and 93½ for refined. In foreign there has been a very active market during the week, and a considerable amount of business has been done in Straits at 86½ 10s. cash, 87½ prompt six weeks, and 88½ for arrival. Banca is held for 89½. The condition of the market is very satisfactory, though towards the close of the week rather more quietness has prevailed.

SPELTER.—Although no very large business has been done, yet prices remain very firm at 21½ 17s. 6d. on the spot.

TIN-PLATES.—There is a better enquiry on the part of buyers, and prices are looking decidedly firmer.

STEEL AND QUICKSILVER remain as last reported.

BIRMINGHAM, JAN. 18.—Bylands' "Iron Trade Circular" says—"The iron trade is more animated. Bars and rails are in fair demand. Pigs are looking downwards, and running off from stocks in larger quantities. Coal is rising as the snow falls, preventing colliers' wages going down, although pigs cannot keep up. Enquiries in some number, and orders coming in. United States letters give firmer trade."

The settlement of the fortnightly account in the MINING SHARE MARKET, which took place on Tuesday, was by far the heaviest known for many months, and showed the rapid and great extension of mining business of late; while the continued rise in metals has not only caused a corresponding rise in shares, but rendered many of them particularly difficult to get. Another feature of the week has been that many small shares, that have been quite neglected for months past, and have borne no price whatever, have been in request. A large business has also been done in several prominent mines, such as Great Retallack, North Crofty, Prince of Wales, Chiverton, West Chiverton, Chiverton Moor, Chontales, Cook's Kitchen, Drake Walls, Great South Tolgus, St. Ives Consols, Prosper United, North Treskerby, Buller, Wheal Seton, Uny, Trelawny, &c. Devon Great Consols, 410 to 420; the ores, 1416 tons, sold on Thursday for 7683½ (including carriage), or at the rate of 5½ 7s. 6d. per ton; and to show the advance in the price of ore, we may state that the sale in December, of 1437 tons, realised only 6132½ 11s., for ore of about

the same produce. So that for 21 tons less ore the company realised 12000 more money for the month. West Chiverton have advanced to 59, 60, and in good request.

Marke Valley, 4½ to 4½; at the meeting a dividend of 2s. per share (9000l.) was declared, and a balance left in hand of 1612½ 0s. 7d. The profit on the three months' working was 1002½ 19s. 2d. The mine itself is not looking quite so well, as far as discoveries go; but the reserves are good, and the returns and good dividends will be continued. Carn Camborne, 21s. to 23s.; at the meeting the accounts showed a balance in favour of the mine of 554½ 0s. 1d., and a call of 6d. per share was made. The mine looks well, and the future prospects are described as of a very encouraging character. North Roskear, 7 to 8 (call paid); at the meeting the accounts showed a balance of 770½ 12s. 4d. against the company, and a call of 1½ 2s. per share was made. The returns of tin have fallen off, but there is, the agents think, a possibility of making a discovery of copper in the levels driving east of the Pressure shaft, where the end has improved of late. Bottle Hill, 3s. to 5s.; Carn Brea, 19 to 21; Clifford Amalgamated, 9 to 9½; Cook's Kitchen, 11 to 12. Drake Walls shares advanced to 17s. 6d., 20s., and in good demand. East Basset, 23 to 25; East Caradon, 6 to 6½; East Carn Brea, 3½ to 3½. South Frances, 20 to 22½. We referred last week to a charge of 4500l. for law costs in the accounts passed at the last meeting, and stated that it would be more satisfactory to the out-adventurers generally if their exact position in regard to these charges were made known, and we now regret to find that a fresh suit is likely to arise between the same parties, a bill in Chancery, a copy of which has been forwarded to us for perusal, having been already filed. We have no time, however, to go through it at present. East Lovell, 10 to 11; no change in the mine, but in the 60, on the south lode, more water is issuing from the end. East Russell, 2½ to 2½; East Grenville, 2 to 2½; Great Laxey, 16½ to 17½.

Wheal Buller, 23 to 25; there is no alteration in the mine. The tin sold on the 9th (7 tons 16 cwt.) realised 389½ 3s. 9d. Great South Tolgus shares rose to 18s., 20s., and in request, but became flatter, at 15s. to 17s. 6d., when it became known that a slight accident had happened to the machinery. Great Wheal Vor, 17 to 18. Great Retallack shares largely dealt in, and leave off 40s. to 42s. 6d. Great Wheal Fortune, 5½ to 6; North Crofty, 4½ to 5; North Treskerby, 2½ to 2½; Prosper United, 3½ to 3½; Providence Mines, 30 to 32. Prince of Wales shares have been very largely dealt in up to 33s., 35s., and leave off 31s. to 33s.; the lode in the 55 has been cut into 2½ feet, and not yet cut through. So far as seen, it indicates a large, strong, and productive lode; and by Tuesday next the value may be known. Independent reports state that it is, so far as seen, fully equal to what the lode was when first cut into in the 45, and which, in turning east, became so rich. Rosewall Hill and Ransom Union, 30s. to 35s.; South Caradon, 320 to 330; South Condurrow, 15s. to 17s. 6d.; South Grenville, 6s. to 8s.; St. Ives Consols, 8 to 9; Tincroft, 14½ to 15½; West Basset, 20s. to 25s.; West Caradon, 12½ to 13½; West Frances, 16½ to 17½; West Seton, 130 to 135; Wheal Chiverton, 8½ to 9; Wheal Grenville, 25s. to 27s.; Wheal Kitty (St. Agnes), 2½ to 3; Wheal Margaret, 8 to 10; Wheal Seton, 125 to 130; Wheal Trelawny, 10½ to 11½; Wheal Uny, 2½ to 3½; Wheal Agar, 25s. to 30s. Chontales shares have left off flatter, at 2½ to 2½; the mail is in, but up to four o'clock we have not received any reports.

The Market for Mine Shares on the Stock Exchange, during the week, has been moderately active. The improving prospects of the Metal Markets has greatly strengthened confidence, and the recent great advance in prices has been well maintained. Some shares that, from exceptional circumstances, like West Chiverton and Westminster, were slow to move, after having suffered great depression, and that were intrinsically the safest in the list, have at last begun to move. West Chiverton shares have risen to 59, 60, and are firm at the price. Westminster, 5 to 5½. Drake Walls, 17s. 6d. to 20s.; a large business has been done in these shares. Great Laxey shares are less firm, at 16½ to 17½. Great Vor shares are steady, at 17 to 18. North Crofty, 4½ to 5; Chiverton, 8½ to 8½; Chiverton Moor, 5½ to 6. Prince of Wales shares have been largely dealt in. Foreign Mine Shares have been quiet during the week. Chontales shares are less firm, at 2½ to 3½. St. John del Rey shares steady, at 52 to 53; Cape Copper, 2 to 2½; English and Australian Copper, 4 to 1 firm; Don Pedro, 4 to 4½ prem.; Anglo-Brazilian, 4 dis. to 4½ prem.; Scottish Investment, 4 to 1; Pestarens Gold, 4 dis. to 4½ prem.; Alamillos, 1 to 1½.

A prospectus for the issue of 5000 unallotted shares in CHATWOOD'S PATENT SAFE AND LOCK COMPANY has just been issued. The prospectus states that the company commenced business in February, with a nominal capital of only 50000l., securing exclusive right to work the patents of Mr. Samuel Chatwood, who has ever since ably acted as manager of the company. The results achieved have enabled the company to regularly declare and pay 10 per cent. per annum, and extended business rendered it desirable to increase the capital to 100,000l.—one-half of which is now offered to the public. To facilitate the carrying out of the proposed objects, the company have secured a very eligible plot of land adjoining the Lancashire and Yorkshire Railway, in Bolton, upon which it is proposed to erect suitable works, when it is believed the company's production will increase tenfold, and that the profits will equal 20 per cent. The board of direction is composed of thoroughly business men, and it has been arranged that when the profits exceed 20 per cent. one half of the surplus may be distributed among the employees. The shares may be fully paid (100l.) on 17, on allotment, and the remainder as required.

At Truro Ticketing, on Thursday, 3609 tons of ore were sold, realising 16,995½ 14s. 6d. The particulars of the sale were:—Average standard, 113½ 15s.; average produce, 64; average price per ton, 47 14s.; quantity of fine copper, 236 tons 12 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Dec. 20th.	3390	1103 0 0	64	£4 5 0	12s. 11d.	£24 11 0
" 27th.	1996	102 18 0	74	4 14 6	13 0	65 0 0
Jan. 3rd.	2204	107 4 0	64	4 12 6	13 5	67 4 4
" 10th.	1513	110 7 0	64	4 14 0	13 10	69 10 0
" 17th.	3609	113 15 0	64	4 14 0	14 4½	71 16 6

Compared with last week's sale, the advance has been in the standard 1½, and in the price per ton of ore about 1s. 4d. Compared with the corresponding sale of last month, the advance has been in the standard 7½, and in the price per ton of ore about 9s.

At East Pool Mine meeting, on Monday, the accounts for October and November showed a profit of 274½ 10s. 6d. A dividend of 320½ (3½ 10s. per share) was declared, carrying over 29½ 11s. 7d. [The agents' report is among the Mining Intelligence.]

At East Caradon Mine meeting, on Thursday (Mr. C. R. Norton in the chair), the accounts showed a credit balance of 2953½ 10s. 5d. A dividend of 614½ 8s. (2s. per share) was declared, and 2399½ 2s. 5d. carried to the credit of next account.

At Marke Valley Mining Company meeting, on Thursday (Mr. W. Fawcett in the chair), the accounts for the three months ending November showed a credit balance of 1245½ 6s. 5d.; a balance of assets over liabilities of 1612½ 0s. 7d.; and a profit on the three months' working of 3401½ 13s. 1d. A dividend of 900½ (2s. per share) was declared. Captain John Truscott reported that the different levels are not so productive as on some former occasions, but in all probability will soon improve. The reserves being very good, the returns will be maintained, and good dividends continue.

At Carn Camborne Mine meeting, on Thursday (Mr. M. Phillips in the chair), the accounts for the three months ending November showed a credit balance of 128½ 19s. 9d., and a balance of assets over liabilities of 554½ 0s. 1d. A call of 6d. per share was made. Capt. John Truscott reported that the future prospects of the mine are of a very encouraging character.

At West Rose Down Mine meeting, on Thursday (Mr. R. W. Childs in the chair), the accounts for the three months ending November showed a credit balance of 121½ 7s. 6d. A call of 10s. per share was made. Captain John Truscott reported that they had every reason to expect a productive mine when the lodes are laid open.

At North Roskear Mine meeting, on Tuesday, the accounts for October and November showed a debit balance of 770½ 12s. 4d. A call of 1½ 2s. per share was made. Capt. J. Vivian and Son and R. Angove reported that the tin stops have declined in the quality of the tinstone. In the copper department their prospects are more cheering.

At the Dale Mine meeting, on Tuesday, the secretary reported that the 2232 shares were all subscribed for, making the issue of the 10,336 shares complete. It was resolved to carry out the recommendation of Captain Nines, the managing agent, to cross-cut to the new Pipe and Lum veins, which he considers a very important trial, and likely to realise the most sanguine expectations. He states in his report of December 20 that it is pronounced by the oldest and best miners to be one of the best trials in the district, and the fact of having proved the existence of a new Pipe vein in connection with the Lum vein must considerably add to its value; but, independently of the new Pipe vein, all the cross veins passed through in working the old Pipe makes in that direc-

tion, which must also further add to its value, and can be easily proved at a comparatively trifling expense, by driving a cross-cut from the old pipe in the 44 ft. level, which will give about 30 fathoms of back to the 26 ft. level, and nearly 100 fathoms to the adit. Taking the whole into consideration, he (Capt. Nines) considers there is every chance of a good mine being opened out.

At Bedford United Mines meeting, on Tuesday, the accounts showed a cash balance of 792, 12s. 6d., and an estimated account of payments and receipts before the meeting in April a credit balance of 521, 3s. 6d. Capt. Phillips says: "For the ensuing four months the costs will be increased by carrying on some new works necessary for the deeper prosecution of the north lode. I believe by the time this work is accomplished the prospects of the mine will be very much better than at present."

At South Callington general meeting, on Jan. 10 (Mr. A. Lascelles in the chair) the accounts showed a debit balance of 37, 0s. 8d., and a balance of liabilities over assets of 171, 2s. 1d. A call of 6s. per share was made. It was stated that there were no arrears, and a very satisfactory report from the agent was read.

At the South Conduvor Mine meeting, on Thursday (Mr. Buckland in the chair), the accounts showed a debit balance of 130, 19s. 6d. A call of 2s. 6d. per share was made.

At Craddock Moor Mine meeting, on Jan. 10, the accounts showed a debit balance of 394, 19s. 6d. A call of 7s. per share was made. Capt. H. Taylor, J. Taylor, and H. Phillips say: "The small engine we formerly had at Harris's shaft was unequal to its work, and caused considerable delay in sinking the shaft and developing the mine, but the new engine is of ample power, and enables us to prosecute this part of the mine without let or hindrance, and will enable us to make greater progress in the future. We may, therefore, hope for increased returns, and with the increasing price of metals believe that the returns will soon meet the costs. We expect to sell about 150 tons of copper ore for the next two months."

At the St. John del Rey Mining Company meeting, on Jan. 12 (Mr. J. D. Powles in the chair), the resolution granting the additional remuneration to the directors was carried, slight modifications having previously been made. Details will be found in another column.

At the Royal Copper Mines of Cobbe (Limited) meeting, on Tuesday (Mr. H. R. Grenfell, M.P., in the chair), the adjournment of the meeting for a fortnight was agreed to. Details in another column.

On the Stock Exchange an average amount of business has been transacted in Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—Chiverton, 83; East Lovell, 94; North Wheel Croft, 44; Prosper United, 11; West Chiverton, 57, 56½, 57½, 58½; East Bassett, 25, 26; East Carn Bren, 3, 34, 33; Great Laxey, 17½; Drake Walls, 1; East Caradon, 63; Great Wheel Vor, 17½, 18. In Colonial and Foreign Mining Shares the prices were:—Scottish Australian, 15-16, 3, 1, 15-16; Chontales, 23, 22, 23; Fortuna, 24; United Mexican, 44; St. John del Rey, 52½; Don Pedro, 3-16, 4, 3 prem; Panulcillo, 2½.

COAL MARKET.—Only 48 fresh ships arrived this week, owing to the stormy weather on the east coast preventing the ships putting out to sea. House coals have been scarce, and the demand, stimulated by the severe weather, caused a rise in the week of 5s. per ton. Haswell Wallend, 28s.; East Hartlepool, 27s. 6d.; Thornley Wallend, 26s.; Harton Wallend, 25s.; Riddell's Wallend, 25s.; Pittington Wallend, 22s. Unsold, 2d. at sea, 5 ships.

THE COPPER TRADE.—Messrs. Vivian and Younger (Jan. 18) write: "All descriptions can be bought at rather lower rates, the principal fall having been in English, which is from 2½ to 3½ per ton lower than last week. This appears to be partly owing to the dissolution of the Smelters' Association, to which we alluded in our last. The immediate effect having been to create more uncertainty and to depress prices. Doubtless this, however, will soon right itself. But the charters for copper produce advised by the mail received from Chili on the 18th inst. are again very heavy, being for 2500 tons of copper contents, 1000 tons being in bars and ingots; the balance in ore and regulus. We have heard of no transaction in any description worth reporting."

THE IRON TRADE.—Messrs. Shaw and Thomson (Jan. 16) say: "The past fortnight has witnessed a revival of confidence and activity in the iron trade, and is full of promise for the current year. The reduction of price in Staffordshire has had the immediate effect of bringing out orders which have been long held back. It remains to be seen whether the men will at once accept the proposed reduction in wages, or commence another strike. Large orders for rails have been given out during the past fortnight. Fully 10,000 tons of 'Erie' rails have been bought on American account, and most of the works in Wales have fair orders on their books. Contracts for about 7000 tons of superior rails have been made out during the fortnight with firms in the North of England. The trade in shipbuilding iron is very limited, but we feel confident an improvement must soon take place. So long as our import and export returns show that the carried tonnage is yearly increasing, there can be no fear that the demand for ships will not also increase. Wooden shipbuilding has almost ceased in the American ports, and is greatly limited in England, so that the iron trade may safely calculate on being benefited, whenever the present stagnation begins to disappear. Pig-iron is dull, and prices rather tend downwards; considering the immense stock, and the powers of production lately brought into existence, the price of pig-iron has kept very high, especially in Scotland. North of England iron is fully 10s. per ton cheaper, and considerable shipments have been made in Scotland."

THE IRON TRADE OF THE NORTH-EASTERN COUNTIES OF ENGLAND.—Owing to changes and reconstructions, and to difficulties with the men, the working of the furnaces during the past year has been somewhat irregular. On the whole, however, 108 furnaces have been in blast—being 3 more than in 1865—several of them for an uncertain period; and the total make of pig-iron throughout the district for the year was 1,945,227 tons. When it is remembered that the larger furnaces, many of which only came into operation in the early part of 1866, had been at work during the whole or greater part of last year, this large production is easily accounted for. Looking at this increased make, at the peculiarly unfavourable circumstances of the past year, and at the disorganised state of the iron trade in the district, in consequence of the protracted strike, it may be a matter for congratulation that the stock of pig-iron on hand, enlarged as it is, had not been still further increased. There is now, however, a prospect of this excessive production being somewhat diminished, as several furnaces have lately been put out of blast—the present number being not exceeding 92; and this, together with the improved prospects of trade, may justify an expectation that stocks may be reduced in the course of the present year. The number of furnaces at present out of blast is 47, and 11 are in course of erection. Some of the latter, however, are only for the purpose of replacing others now in blast. The foreign shipments have fallen short of those of the previous year by 19,827 tons, the total for 1866 being 107,513 tons, and 127,340 tons for 1865. To France, 45,992 tons were exported in 1866, against 49,284 tons in 1865; to Germany, 12,796 tons, against 20,894; to Holland and Belgium, 35,225 tons, against 39,354; to Denmark, Norway, and Sweden, 6447 tons, against 7591; to Russia, Italy, and other countries, 7654 tons, against 10,217. The statistics of the pig-iron trade of the district for the past year are as follows:—
Total stock, Jan. 1, 1866 Tons 76,905
Make during the year 1,945,227
Total 1,120,432
Shipped for exportation abroad 107,513
Used in the rolling-mills and foundries in the district, shipped for delivery coastwise, and sent away by rail 855,398— 962,911

Total stock, Jan. 1, 1867, of which 95,202 tons in the hands of makers, and 62,319 tons in store 157,521
In presenting this report for 1866, which possesses many features of great interest, it may be remarked, in conclusion, that if the review of the past is not altogether pleasant, the prospect is more cheering for the future. The new year upon which we have just entered opens auspiciously. Peace, that promoter of commercial prosperity, almost universally prevails. Financial matters, likewise, were never in a more satisfactory condition; and the revenue returns evince a healthy state of the general trade of the country. Under these more favourable circumstances, it is not unreasonable to expect that the pig-iron trade may considerably improve during the present year, and that, if not high rates, at least remunerative prices may be realised.—RICHARD HOYLE, Metal Broker, Newcastle-on-Tyne, Jan. 12.

LIQUID FUEL BOILERS.—In pursuing his experiments with a view to substitute petroleum for coal in the generation of steam, Mr. C. J. RICHARDSON has discovered an even cheaper compound than the least saleable mineral oils. He finds that coal tar, cresote, naphthalene, and other similar products, may all be burned in the same way as he has proposed to burn the crude oils; a compound with which he has obtained excellent results, being formed of coal tar, two parts; cresote, three parts; and one or two parts of heavy shale oil. The inventor will have a boiler at work at Woolwich Dockyard in course of a few weeks, when he will be glad for all interested to inspect it.

THE HEMATITE IRON COMPANY (Limited) has acquired the lease of a very valuable iron property, immediately adjoining the well-known Royal Restormel Iron Mine, now being worked by Messrs. John Taylor and Sons, which has made large and profitable returns for it, it is stated, over 100 years. The rich lodes of Restormel run through the Hematite Company's sett, and can be very advantageously operated upon, so as to yield an early dividend to the shareholders. The following is the report of a competent engineer in the district of the property:—

Although I have known the neighbourhood for 20 years, I had no idea that any vacant ground (so closely attached to the Messrs. Taylor's, of which so much is known for yield of the best description of ironstone) could possibly be obtained. With the underlie of their lodes into your ground, you cannot fail to have a mine in all respects equal to the original one; in fact, the lode has been worked open (and still is being worked, by virtue of a deep level) to within 3 fathoms of your boundary; but in the open cutting above, thousands of tons of ore must have been raised, at a great profit to the owners. After what has been said by others in detail of your property, it is only necessary for me to add that I regard it as one of the best promises in this country, because no doubt can possibly dwell upon the mind of any man as to the existence of an unlimited supply of such quality ore as will at all times find a ready market. The situation of the mine,

too, for deep-level operations, and transit to the water side, cannot be surpassed; and all circumstances considered, I think it a valuable property.

From the above it would appear that the undertaking is likely to prove a valuable investment, and there is certainly every prospect that it will do so. The dead rent of the property is only 5s. per annum; royalty, 6d. per ton. The capital is 5000l., in 1000 (5s.) shares.

PARIS EXHIBITION, 1867.—In order that all useful mechanical novelties connected with mining and metallurgy, or with the sciences allied thereto, may be fully described in the *Mining Journal*, the Editor has made arrangements to send a special representative to Paris, to make the necessary examination of the machinery, apparatus, &c., exhibited. To facilitate such examination, it is most desirable that exhibitors should supply, as soon as convenient, mechanical descriptions of their inventions, &c., which will be regarded as confidential communications until the articles referred to have been examined. Communications may be forwarded either direct to the Office, 26, Fleet-street, London, or to the care of Messrs. Vimeux, Stouff, and Co., Bankers, 3 Rue Daval (Beaumarchais), Paris.

DEPOLARISATION OF IRON SHIPS.—We are glad to learn that the experiments which have been carried on by Mr. Evan Hopkins on board the *Northumberland*, at Sheerness, have proved most successful. Mr. Hopkins expects in a very few days to prove, to the perfect satisfaction of the officials, the complete efficacy of his invention in depolarising iron ships generally. It is gratifying also to find that the Admiralty have rendered every assistance to Mr. Hopkins to enable him to carry out his views.

GEOLOGICAL SOCIETY OF LONDON.—January 9: Warrington W. Smyth, M.A., F.R.S. (President), in the chair. George Clark, of Dowla, Jas. Eccles, Springwell House, Blackburn; William Harris, M.A., Osborne Villas, Windsor; and J. Charles Pooley, F.R.C.S., Raglan Circus, Weston-super-Mare, were elected Fellows. The following communication was read:—"On the age of the Lower Brick-Earths of the Thames Valley," by W. Boyd Dawkins, M.A. (Oxon), F.G.S.

On Wednesday, the following papers will be read:—"On Chemical Analyses of Variegated Strata," by G. Maw, F.G.S., &c.—"On the Jurassic Fauna and Flora of South Africa," by Ralph Tate, F.G.S.—"On Consolidated Blocks in the Drift of Suffolk," by George Maw, F.L.S., F.G.S.

SOCIETY OF ENGINEERS.—On Monday there will be a special meeting, to elect five members for the council, the presentation of premiums, and the President's inaugural address.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending Jan. 13 was 9590l. 19s. 4d.

SLATE QUARRY IN WALES.—A MANAGER IS REQUIRED TO UNDERTAKE THE SUPERINTENDENCE AND DIRECTION OF A FIRST-CLASS SLATE QUARRY. He must possess practical knowledge and experience, and be enabled to produce satisfactory testimonials, copies of which must be forwarded with the application. A liberal salary will be given. Apply, by letter only, to "A. B.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

THE LESSEE OF A VALUABLE BRITISH COPPER MINE, on which there is the requisite plant, and from which many thousands of pounds worth of rich ores has been raised. WISHES TO MEET WITH A PARTY who could get the REQUISITE CAPITAL THOROUGHLY TO DEVELOPE IT. Apply by letter, to "P. A. H.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

TO IRONMASTERS.—The ADVERTISER, who has had many years' experience in manufacturing M bars, angles, plates, sheets, hoops, and rails, is NOW OPEN FOR AN ENGAGEMENT as OUT-DOOR MANAGER. Good reference will be given. No objection to go abroad.—Apply to "A. B. C.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

TO CAPITALISTS AND OTHERS.—The CO-OPERATION OF A GENTLEMAN IS REQUIRED, who can advance £3000, to COMPLETE THE DEVELOPMENT OF AN IMPORTANT SLATE QUARRY IN NORTH WALES. The benefit accruing to the mortgage will be from 20 to 40 per cent.—Apply by letter, to "W. A. C.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

A SILVER-LEAD MINE: has been worked by the present proprietor for nearly two years at his sole cost. Discoveries have been made yielding returns, which may be continued indefinitely at an inconsiderable outlay. CO-OPERATION IS DESIRED, to the extent of £500, in one or more sums, on the basis of half profits. Principals only will be treated with. Address, "Argentum," care of Wm. Coleman, Esq., No. 53, Moorgate-street, London.

A THREE-QUARTER SHARE IN THE TEMEXAL TIN MINE, situated in SAN BERNARDINO COUNTY, CALIFORNIA, FOR SALE.—For particulars and report, address "M.," the *Bullionist*, 7, Finch-lane, E.C.

A GENTLEMAN having an extensive connection with merchants, manufacturers, and others, would be GLAD TO UNDERTAKE THE SALE OF PATENTED ARTICLES OR INVENTIONS, upon commission.—Apply to Mr. W. T. RAWLE, patent and mining agent, 8, Small-street, Bristol.

WANTED, AN AGENCY TO SELL RED ORE, POTTERY MINE, COKE, or IRON, in the SOUTH STAFFORDSHIRE DISTRICT.—Address, "H.," at Willey's, wholesale stationer, Birmingham.

MINING JOURNAL—FOR SALE, ELEVEN YEARLY VOLUMES OF THE MINING JOURNAL, 1856 to 1866 inclusive. The whole neatly bound, and in excellent condition.—Offers to be addressed to "D. M.," Post-office, Exeter.

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TRANSACT BUSINESS in every description of STOCK EXCHANGE SECURITIES, MINING AND MISCELLANEOUS SHARES, at close market prices. Special business in Chontales, Prince of Wales, and Great Retallack shares.

SHAREHOLDERS IN PUBLIC COMPANIES desirous of avoiding calls and further responsibility will find purchasers on applying to Messrs. BARRETT AND CO., 78, LOMBARD STREET, CITY, and No. 20, SPRING GARDENS, CHARING CROSS. Stocks, shares, mining, and other miscellaneous securities bought and sold. Investment Review on application. Cash advances made.

GUIDE TO INVESTORS.—Mr. SPARGO'S "Guide to Investors" for the present month contains a tabulated statement of Banking, Mining, and other Companies, showing the depreciation in value during the last twelve months; and a price list of shares in Banks, Canals, Railways, Bridges, and Finance Companies up to Tuesday, the 8th instant. It also contains articles on "Bulls and Bears," and their effects; Retrospect of 1866, and Prospects of 1867; the Revenue, our Position and Prospects; the Mine and the Rail; with necessary detailed information connected with the Stock and Share Markets, Mines, and Miscellaneous Companies.

224 and 225, Gresham House, Old Broad-street, London, E.C.

BRITISH AND FOREIGN INVESTMENT.—MR. THOMAS SPARGO, STOCK AND SHAREDEALER, 224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION OF BUSINESS IN THE PURCHASE AND SALE OF SHARES IN BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, AND ALL OTHER DESCRIPTIONS OF BRITISH AND FOREIGN STOCK.

Mr. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C. Bankers: Consolidated Bank, and Metropolitan and Bank (Limited).

GALLOWAY'S PATENT CONE TUBES FOR STEAM BOILERS.—The introduction of these vertical taper tubes into the ordinary flued boilers PROMOTES THE NECESSARY CIRCULATION OF WATER, and thus INCREASES THEIR STRENGTH AND DURABILITY. Their adoption not only adds to the steam-producing power of the flues, but renders the practice of hooping with angle or tee iron rings quite unnecessary. The tubes have now been in use upwards of 14 years, and above 22,000 are in work in various parts of the country, with the best results. They can be easily fixed in existing boilers (owing to their taper form) by any boiler maker, but can only be obtained from the patentees, W. and J. GALLOWAY and SONS, Engineers and Boiler Makers, Manchester.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO., PENHALICK, POOL, near CAMBORNE, CORNWALL, and BRYMBO, near WREXHAM, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.

For the convenience of their customers and others in the North, W. BRUNTON and Co. have recently erected a branch manufactory at Brymbo, near Wrexham, where, as at Cornwall, they are at all times PREPARED TO EXECUTE UNLIMITED ORDERS FOR SUPPLYING FUSE, upon warrant that it will prove equal to, if not better than, any to be procured elsewhere.

ELFORD, WILLIAMS, AND CO., COPPER ORE WHARFINGERS, SHIP BROKERS AND COAL EXPORTERS, METAL AND GENERAL COMMISSION AGENTS, SWANSEA.

ELFORD, WILLIAMS, and Co. have erected an assay office, and engaged the services of a practical Cornish assayer, who will receive his whole time, to this branch of his business, they are now in a position to make correct assays of silver, copper, and other mineral ores, on the most moderate terms.

THE COAL TRADE.—It is gratifying to find that the coalowners fully appreciate the responsibility which attaches to them as a body for the lamentable colliery explosions which have recently occurred. Mr. Wm. Mathews, the Chairman of the Mining Association of Great Britain, has directed Mr. J. W. Day (the secretary), in convening the meeting of members to be held at the Craven Hotel, London, on Thursday, to "urge upon them the necessity of their attendance, so that as large a meeting as practicable may be formed,"—adding, "These recent deplorable accidents will naturally excite the attention of the Government, as well as that of the general public, and the association will be placed in a position of considerable responsibility." On Monday a meeting of the coal trade was held at Dudley (Mr. F. Smith in the chair), and was well attended, but no business was done, and an adjournment for a fortnight was agreed to.

MINERAL TRAFFIC ON SECONDARY RAILWAYS.—We have already detailed the amount of minerals carried in 1865 on the principal railway systems of the United Kingdom. We may now add a few similar details with regard to the amount of minerals conveyed over several lines of secondary importance. The Blyth and Tyne carried in 1865, 1,958,167 tons; the Bristol and Exeter, 174,768 tons; the Cambrian, 221,979 tons; the Cockermouth and Workington, 244,967 tons; the Cockermouth, Keswick, and Penrith, 53,809 tons; the Colne Valley and Halstead, 34,166 tons; the Cornwall, 56,572 tons; the Down, 363,846 tons; the Festiniog, 81,982 tons; the Fleetwood, Preston, and West Riding Junction, 91,280 tons; the Furness, 1,030,943 tons; the Liskeard and Caradon, 47,453 tons; the Llanelly, 529,868 tons; the Llynvi Valley, 321,134 tons; the Londonderry (Seaham to Sunderland), 724,822 tons; the Manchester, South Junction, and Altrincham, 443,697 tons; the Maryport and Carlisle, 656,635 tons; the Mid-Wales, 63,107 tons; and the Monmouthshire, 2,101,947 tons. Some of the lines which make no great figure in the world have thus a considerable mineral traffic.

LEAD ORES.				
Date.	Mines.	Tons.	Amount.	Purchasers.
Dec. 19—	Llangynog United	70	Walker, Parker, & Co.
Jan. 12—	Minera Boundary	20	£12 18 6	A. Eytton.
14—	Glogfawr	104	14 0 0	Sims, Williams, & Co.
15—	Wrongrech	169	12 7 0	ditto
16—	West Frongoch	42	11 6 0	Runcorn Company.
17—	Gwalithoch	5	12 1 0	Sims, Williams, & Co.
18—	East Darren	65	15 17 6	Mining Co. of Ireland.
19—	Cwmystwith	30	15 18 0	Panther Lead Co.
20—	ditto	16	16 1 0	Sims, Williams, & Co.
21—	ditto	16	16 1 0	Runcorn Company.
22—	Whitewell	50	12 3 0	Washington Co.

BLACK TIN.				
Date.	Mines.	Ts. a. q. lbs.	Price p. ton.	Amount.
Jan. 4—	Wheal Buller	6 19 3	1 0	£358 2 7—Carvedras.
5—	ditto	0 17 0	2 2	31 1 2—ditto

COPPER AND COPPER ORES sold at LIVERPOOL, from January 1 to January 14.

Messrs. Pitcairn-Campbell and Co. (Liverpool, Jan. 15) write:—During the past fortnight the market has been unsettled by the action of some of the leading smelters, and their differences have resulted in the disruption of the Association. Whether it will be temporary, or what the consequences may be, it is difficult to appreciate, but the same thing has happened before, and a new understanding may possibly be re-established. In the meantime, business is interfered with, and, as duplicates of the West Coast Mail, via the United States, advise a full quantity of copper chartered for, we close with less animation. Stocks of copper produce (Chilian and Bolivian) in first and second hands likely to be available, at present here and at Swansea are as follows:—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	1470	1123	2260	579	373
Swansea	5661	4895	357	—	64
Quotations are 15s. to 15s. 3d. for ore and regulus, 77l. to 78l. for bars, and 16s. 3d. to 16s. 6d. for Barilla. The sales since Jan. 1 have been:—					
Mine or ship.	Tons.	Price.	Mine or ship.	Tons.	Price.
Bars—Craigie Lee	40	£21 0 0	Ore—Second hands	500	Private.
Bars—Second hands	30	78 0 0	Ore—Canadian	500	£0 15 0
Bars—Urmantia	13	76 10 0	Reg.—Second hands	180	0 15 0
Bars—Castlehow	16	77 0 0	Reg.—Star of the West	314	0 15 3
Bars—Don Enrique	23	80 0 0	Ore—Uncas	630	0 15 0
Bars—Polestar	27	80 0 0	Ore—Theta	590	0 14 9
Reg.—F. Danvers	100	0 15 0	Ore—Joseph Thomson	597	0 15 0
Reg.—Lord Marmon	240	0 15 0	Reg.—Floren. Danvers	80	0 15 0
Reg.—Delta	260	0 15 0			

The sale of 9 tons bars, ex Mersey, reported in our last at 76½, should have been 75½. The arrivals have been:—At Liverpool, 65 tons bars, ex Polestar. At Swansea, 750 tons regulus, ex Tongoy; 170 tons ore and 284 tons regulus, ex Emme-line; and 550 tons ore, ex Delaware.

Of the Chilian imports during the year quantities have been distributed to the two different ports as follows, and the discrepancy may be worthy of the attention of importers.—Ores. Regulus. Barilla. Slab. Total fine.

Swansea	21,432	23,654	4470	20,583
Liverpool	10,450	10,656	1530	6421	14,753

Showing that in the copper contents of ore and regulus only 8332 have come to Liverpool, whilst 16,115 have gone to Swansea, thereby accounting for the advantage generally obtained in Liverpool in point of price.

COPPER ORES. Sampled Jan. 2, and sold at the Royal Hotel, Truro, Jan. 17.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Great Consols	124	£5 8 6	East Caradon	73	£4 7 6
ditto	123	5 6 6	ditto	38	1 11 6
ditto	122	5 17 6	ditto	25	8 15 6
ditto	119	6 3 6	Devon and Cornwall	77	2 3 6
ditto	117	5 0 0	ditto	52	5 17 6
ditto	109	5 11 6	ditto	38	2 0 6
ditto	107	5 1 6	ditto	26	2 2 6
ditto	105	5 1 6	ditto	24	7 14 0
ditto	104	4 8 6	ditto	24	2 1 6
ditto	101	4 14 6	Wheal Friendship	92	2 1 6
ditto	98	4 17 0	ditto	72	5 10 0
ditto	85	3 11 6	ditto	41	13 16 6
ditto	49	4 16 6	Wheal Emma	61	4 2 6
ditto	32	11 11 6	ditto	51	2 19 0
ditto	31	13 13 6	ditto	37	8 17 0
ditto	25	3 5 6	ditto	12	14 5 6
ditto	74	5 10 6	East Russell	56	6 9 6
ditto	69	1 10 6	ditto	15	5 5 6
ditto	57	5 13 0	ditto	15	2 11 6
ditto	52	5 9 0	Bedford United	56	4 5 0
ditto	32	3 11 0	ditto	38	5 2 6
Hilgton Down	94	3 0 0	West Maria & Fortes	22	0 19 0
ditto	90	3 0 0	ditto	20	1 14 0
ditto	80	2 6 6	Wheal Creake	50	3 5 6
ditto	79	2 7 6	Caradon Consols	53	5 5 6
ditto	70	2 16 0	Furdon	26	8 8 6
ditto	25	7 12 6	Wh. Mary Florence	29	5 1 6
East Caradon	87	4 7 6	Holmbush	13	2 12 0
ditto	80	5 16 6			

TOTAL PRODUCE.									
Devon Great Con.	1416	£7613	3	6	Bedford United.	94	£432	15	0
Marke Valley	450	1806	0	6	W. Maria & For.	69	136	16	0
Hilgton Down	409	1249	2	6	Wheal Creake	50	163	15	0
East Caradon	300	1440	10	0	Caradon Consols.	53	290	9	0
Devon & Cornwall	260	1031	2	6	Furdon	26	141	1	0
Wh. Friendship	205	1153	1	6	Wh. Mary Flor.	29	101	10	0
Wheal Emma	161	900	16	0	Holmbush	13	33	16	0
East Russell	107	291	2	6					

MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

CENTRAL DISCHARGE WATER-WHEELS.—An improved centre discharge water-wheel is at present being made in San Francisco. Where there is a good head of water it is probably one of the most simple and effective wheels that can be obtained. The form is similar to Gulbal's ventilating fan, but it works the reverse way.

MINE AND SHAREDEALERS,
 CAMBORNE, CORNWALL.

commend them (the men)," they say, "before they come absolutely

to the conclusion that partnership with their masters would be an advantage to them, to endeavour to ascertain the proportion of failures in the iron trade to fortunes realised." This may be honest, but, we think, is in very bad taste, and we strongly recommend the general adoption, both by masters and men, of the principle of co-operation, which will tend quickly to render the latter perfectly independent of the influence of Unions, and the former equally independent of strikes. Unionism is a snare laid by the crafty to entrap the hard-working man within their grasp, and everything that is done to break through this pernicious system is a step in the right direction. Nothing, in our opinion, will tend more to bring about an amicable and co-existent principle of action between master and man than that of mutual beneficial co-operation, after due and proper compensation is given to the proprietors, either for land, plant, or whatever it may be, and we wonder, therefore, that Messrs. CREED and WILLIAMS can have the assurance to try to deter men from this benefit by the sinister inference that ironmasters should not be co-operated with, by urging them (the men) "to ascertain the proportion of failures in the iron trade to fortunes realised."

The arrival of the Australian mail places us in possession of information with respect to some of the mining undertakings in South Australia, all of which appear to be progressing satisfactorily, with every probability of great results in many cases. From the Burra, Moonta, and Wallaroo, we have not details, but correspondents state that the latter is getting rapidly into great favour, and many are of opinion that it will outstrip the Moonta in richness of ore and quantity of production. Burra Burra shares (5s. paid) were selling at 40s. and Moonta, also 5s. paid, at 126s., while the price of copper was 83s. per ton. Proceeding to the details as to mines, it appears that the accounts from the Worthing show that if the price of copper continues to advance in this country they will very soon be able to show good profits, per month. The regulus from the ore smelted gives an average of over 11 per cent. of the latter, and yield better month by month as they descend in depth in the workings. The stopes in the deep levels looked well. The number of hands employed in the mine was 126. The English and Australian Copper Company had shipped 100 tons of copper since the previous month, and had three smelting and one roasting furnace, and one refinery, at work at Port Adelaide. The Yorke Peninsula Company report that the several levels continue to improve, and the lodes generally were looking well. From the Great Northern the manager, Captain JAMES, states that they are sinking close to the junction of two new branches, where it is usual to find ore, and which he calculates upon doing—indeed, there seems good ground for expecting a revival of this undertaking in its best sense; at all events, for giving the property a further and more energetic trial. A few tons of rich ore had been raised from the Nuccaleena Mine.

The directors of the Yudanumutana have letters from their agent, dated Nov. 23, who says—"I have to advise a further shipment of 13 tons 7 cwt. of copper per *Goolba*, which vessel has sailed. I have also shipped per *City of Adelaide* 3 tons of copper, and hope to send 50 tons by her, and have now at port, and in transit thereto, 17 tons of copper, which will be shipped in about ten days. The wood contractors are delivering a large quantity of fuel weekly, and we shall shortly have more than twelve months' supply on hand." While, with respect to Blinman, Capt. Anthony reports that—"The bottom of the 10 ft. level, north of No. 4 shaft, is being stoped by six men; lode 8 feet wide, of 12 per cent. ore as broken; and three men are stoping the back of the 10; lode 5 feet wide, of 14 per cent. ore as broken. No. 2 furnace has been at work during the past four weeks, and made 18 tons of copper. No. 3 furnace has worked two weeks, and made 9 tons of copper. Both furnaces are now in good repair. During the last month I have smelted the following ores—54 tons of burrows, 73 tons of smalls, and 30 tons of third and fourth class ores, and have made therefrom 27 tons of copper."

MINING, METALS, AND MINERALS—PATENT MATTERS.

By M. HENRY, Patent Agent and Adviser, M. Soc. Arts, Assoc. Soc. Eng.

Among the numerous applications of metals to purposes in the useful arts, its employment in naval architecture has become recently of very great importance; in fact, it is only within the last few years that naval architecture itself has attained a special position as a branch of what may be designated scientific industry. The establishment of the Institute of Naval Architects, and the organisation of the Government School of Naval Architecture, are steps in a wise direction. If England is to retain the empire of the seas, or even to compete with other nations on an element where she was long considered especially "in her own element," she must maintain her position no less by the build and appliances of her ships than by the quality of the hands that man them. Possibly the vexed question, as to the relative sea-going qualities of wood and metal is not yet settled, notwithstanding the hard run lately made in the latter direction. That we have not yet reached the *ut supra* of accuracy of form in the material in present vogue may be readily admitted. Canning's glorious description of a ship with her sails set would assuredly not apply to the unpleasant-looking metal craft which are the modern substitutes for our ancient graceful "hearts of oak," which, according to the old patriotic song, "were our ships." Fortunately, the same description of "hearts of oak are our men." It may also be presumed that the solution of the problem as to what may be the best metal for purposes of naval architecture has not yet been positively arrived at. The liability of iron to corrosion and fouling is one among other objections to its use. Numerous patents have been taken out in reference to this subject. A specification, having for its object to prevent this corrosion and fouling, has been recently filed by W. P. PIGOTT, No. 1209. The patentee causes a galvanic action to take place between the iron of which the ship is constructed and another metal which is electro-positive to iron; the metal to which preference is given is zinc. He uses the sea-water itself as the exciting fluid, and thus produces, by means of the two metals and sea-water, a galvanic pile or battery, and the result is that the zinc or other electro-positive metal used will be slowly corroded, while the iron, which is electro-negative, will be preserved. The extraordinary tenacity of vegetation to the metal hulls of ships was instanced recently in the examination of the French armour-plated ship, *Le Taux*, an allusion to which appeared in the press. In these cases, when it becomes necessary to clean plates below water-line from vegetable accretions, the diving apparatus of Denayrouze and Rouquayrol becomes of great utility. This diving apparatus was the subject of some patents taken by me recently, and has the peculiar advantage of enabling unskilled persons, or seamen who have had but a very short training in the art of diving, to go under water rapidly, to work with almost as much ease and freedom as on land, and to be less liable to pulmonary oppression or risk of accident than in the old arrangements. The diver's arms are free, as, instead of working in what may be described as a compressed air-chamber, he receives air from a reservoir which he carries on his shoulders, and which communicates with an air-box by a valve, connected with and operated by a flexible diaphragm, worked by the circumambient pressure. The diver's mouth through a pipe connected with a mouthpiece, which he holds between his teeth. The air-valve is of rather singular construction. It consists of a conical plug, guided in a long chamber, the arrangements of which merit more detailed explanation than can be conveniently given in this article; but, as I have already said, Denayrouze is about to publish a pamphlet on the subject, it may again be referred to. A patent for a surveying instrument has recently been specified by D. R. ENDERBURY, No. 1202. The patentee's object is to enable the surveyor to draw a plan while the survey is proceeding, by which means the survey-book and the making of a drawing subsequently may be dispensed with. It consists of a sheet of paper is screwed. The table can be placed on a level with the plane of the horizon, and it can be adjusted to correspond with the line of ground to be surveyed. Above and around this table is a frame, made to move independently of the table, and carrying a telescope and a scale, which is close to the surface of the paper on the table, and which moves the telescope. The telescope has vertical motion in the plane of the surrounding country, and a scale is attached to it, to convert hypsometrical into horizontal measurement. —COLESET, the celebrated patentee of the French beton, while he is called by his name as agent for another patent of improvements relating to the mode of manufacture and various applications of the beton; the title also embraces a new machine for preparing it. Lime is, of course, an important ingredient of beton, and its peculiarities and properties would seem to have been carefully examined by M. Coignet. With respect to lime, a patent has been recently specified by J. L. SWANN, No. 1317, for improvements in lime-kilns, and in apparatus to be used in burning lime. Swann uses a number of chambers, made into one in front, for charging and discharging the material, and for firing it in the usual way. The chambers are vaulted over at top, and two flues pass out at top; one of these dips down, and enters the next chamber at bottom; the other passes to a chimney in the centre of the stack of burning chambers. The flues are all provided with dampers, by which they may be opened or closed. The chambers being thus charged with limestone, one is fed in front in the usual way, and the hot products from this chamber pass by the flue into the bottom of the next chamber, and ascend through the charge within; and thus the limestone in the hot air may be passed into a third chamber, or, if too much cooled to be usefully applied in this way, it is passed at once to the chimney. He combines with each chamber a passage at its lower part, to conduct a current of air into it, and thus prepare the lime for burning.

Opposition intended to the following Notices to Proceed must be

entered on or before Feb. 5:—No. 2278, WERN, glass or melting furnaces.—No. 2285, JOHNSON (communication from Madame Delong), cutting frets on metal, &c.—No. 2470, VAN DERBURGH, artificial stone cements, and other compositions.—ROBERTSON, No. 2586, furnaces, fire-places, and fire-bars.—No. 2273, BROWN, No. 2304, NEWTON (communication from Reynolds), welding steel to malleable iron, and tempering steel.

Among Patents sealed the following may be noticed:—No. 1823, J. C. FURNEL, for the manufacture of iron and cast-steel.—No. 1902, SAUNDERS and PIER, for tin and terre plates.—No. 2331, BONNEVILLE (as a communication from J. L. Vergniaux and J. A. Chéron, of Paris), for an apparatus to excavate, deepen, scour, and remove mud, &c., from harbours, havens, guts, bars, channels, &c.

FOREIGN MINING AND METALLURGY.

A slight check has appeared in the Belgian coal trade; nevertheless, prices have preserved great firmness, and the deliveries, by railway especially, continue to be as active as possible. At Liège the current price for coal of first quality is 19s. 2d. per ton, and of coal from miscellaneous sources of supply 12s. 10d. Unwashed coke has made 17. per ton. In the basin of the Couchant de Mons washed coke has made 11. 4s., and unwashed 11. 5s. 8d. per ton. The Belgian Association of Foremasters has just held a quarterly meeting. The proceedings of the meeting, which was numerously attended, were very interesting, the three questions discussed being—first, the extinction of five or six blast-furnaces; secondly, a reduction in wages; and, thirdly, purchase in common of the coke-works of the Ruhr. The meeting was unanimous in recognising the utility and desirability of applying these three measures, and they would have been adopted if the representatives of two siderurgical companies had not preferred to decline to enter into a definitive engagement for some days. It is understood that the reduction in wages will be 10 per cent., that the quantity of Ruhr coal purchased will be 2,500,000 tons, and that an indemnity will be accorded to the blast-furnaces extinguished in the public interest. The importations of minerals into Belgium in the first eleven months of 1866 amounted to 289,300 tons, as compared with 310,400 tons during the corresponding period of 1865, and 199,000 tons during the corresponding period of 1864. The imports of minerals showed, then, a diminution of 21,100 tons, when compared with the corresponding period of 1865, and an increase of 90,300 tons, when compared with the corresponding period of 1864. The increasing imports of rough pig into Belgium have excited a good deal of attention. During the first eleven months of 1866 they amounted to only 7300 tons; during the corresponding period of 1865 they rose to 18,300 tons; and during the same period of 1866 to 29,590 tons. It is England which sustains the greatest part in these importations, and the relatively low price of its products is the cause of the increase observable in 1865 and 1866. Thus, in the first eleven months of 1864 England sent to Belgium 5300 tons of pig; in the first eleven months of 1865, 17,000 tons; and in the first eleven months of 1866, 26,200 tons. The total exports of Belgian pig in the first eleven months of 1866 amounted to only 14,000 tons, while during the corresponding period of 1864 they were 21,400 tons, of which 17,200 tons were exported to France, and 4200 tons to England. These latter totals greatly diminished during the first eleven months of 1866, in which France received only 9600 tons, and England only 241 tons. Of rails, the exports during the first eleven months of 1866 amounted to 62,734 tons; they amounted in the same period of 1864 to 75,355 tons. The position of the Belgian blast-furnaces is becoming more and more aggravated. The stock of pig is considerable, and similar English products present themselves in great abundance, at prices to which the Belgian foremasters cannot descend—21. 14s. per ton on trucks at Antwerp, exclusive of duties. A reduction of wages is stated to have been made by some establishments of the Centre. It is certain that since the advance in the price of coal the Belgian metallurgical establishments have had to suffer a great deal, and there is no doubt that the foremasters will endeavour to find some remedy for the present state of affairs.

Some correspondence has taken place between the French Minister of Public Works and the President of the Lille Chamber of Commerce with reference to the import duty levied on foreign coal. The Minister expresses his opinion that the free importation of foreign coal would not remedy the scarcity of combustible, of which the industrialists of the Nord and the Pas-de-Calais complain. A commission is about to be appointed, it appears, which will be charged with the duty of inquiring into the necessary means of developing and stimulating the extraction of coal in France. No new affair of any importance has occurred to change the aspect of the market, which remains as quiet as possible. The price of coke made from iron remains without change at 8s. to 8s. 4s. per ton; of mixed iron at 8s. 12s. to 8s. 16s. per ton; and of iron from charcoal-made pig, at 9s. to 9s. 4s. per ton. A number of foremasters of the Meuse and the Marne are endeavouring at present to obtain concessions of mines of iron in the metallurgical basin of the Meuse. M. M. Borner, Jamin, Bailly, and Co., and the proprietors of the Scierie de la Meuse, are making applications of this kind for concessions in the arrondissement of Nancy and Toul. Meetings are announced as follows:—Chartreuse and Violette Collieries Company, Jan. 19, at Grivegnée; Denain Blast-Furnaces and Forges Company, Jan. 25, at Paris; Layon-et-Loire Collieries Company, Jan. 27, at Paris; Bank of Mines, Jan. 29, at Paris; and Mulheim-sur-Ruhr Mines Company, Jan. 29, at Mulheim, &c.

The production of the coal mines of Belgium during 1865 amounted to 11,840,000 tons, showing an increase of 740,800 tons over 1864. The share of the Hainaut in this production was 9,200,000 tons, and in the increase 555,000 tons. This augmentation was divided as follows between the three basins of the Hainaut:—Charleroi, 295,000 tons; the Mons (Borinage), 131,000 tons; and the Centre, 109,000 tons. The wages paid appear to have improved last year.

The price of copper has been firmly supported both at Berlin and Cologne, with an upward tendency. The reports received from Havre are less satisfactory; in consequence of the last advices from the Southern Seas, announcing deliveries of some importance—comprising 2000 tons of fine copper for England and 50 tons for France—the market has sensibly retrograded. A lot of 25 tons of first mark, to be delivered at the end of January, has made 78s. 16s. per ton, Paris conditions; another lot of 20 tons, to be delivered at the end of February, has made 78s. per ton; and another of 10 tons, to be delivered at the end of March, 79s. per ton. The sale is also mentioned of 85 tons, to be delivered at the end of January, at 78s. 10s. per ton. The Paris market continues quiet at the prices of last week, with a little feebleness, nevertheless, in Chilean, which is maintained at 79s. to 80s. per ton. A fresh advance is reported in tin. On the Amsterdam and Rotterdam markets Banca has been particularly in favour; various lots have been run off at 50½ fl. to 51 fl., while holders have in some cases sold out for 51½ fl. The position of the German markets has sensibly improved in presence of the good tone of the article in Holland and England; at Berlin and Cologne, Banca has been sought after, and at Hamburg holders have run off their stocks at fully previously quoted rates. At Stettin the article has risen, and has given rise to some animated transactions, Banca making 92½, Detroit, 90½, and English, 90½ per ton. An absence of demand occasions a great want of activity in lead, and the transactions effected scarcely exceed the daily requirements of consumption; nevertheless, prices are generally sustained tolerably well, which may be attributed to the scantiness of stocks on some of the principal markets. Prices have experienced no sensible change. The zinc markets have become more quiet, although the position of the article is affected by the temporary check in the demand. The present state of affairs is very favourable, and producers rely on a good season during the next months of the year. At Breslau the state of affairs has not varied. The Hamburg market has been very firm, although no important sales have been effected for several days past. At Paris rough Silesian is quoted by continuation to 23s. 12s.; zinc from other sources, 22s. 16s. to 23s. 4s.

REPORT FROM SCOTLAND.

GLASGOW, JAN. 15.—So far as we have been able to ascertain, a large majority of the malleable ironworks in Scotland have commenced this week at the reduction of 10 per cent., the workers accepting of the reduced rate of wages wisely and willingly. The reason why the resumption of operations at the malleable works was so long deferred after the close of the holidays was to enable employers and employed to understand each other definitely, so as to avoid a collision. The whole question of wages may be said, therefore, to be satisfactorily settled, at least for a time, and the quotations for manufactured iron were formally announced yesterday by several first-class houses at a reduction of 10s. per ton, second quality having only given way 7s. 6d. per ton. Orders which had been kept up at the close of the year are now offering, and what is not a bad sign, prompt delivery is requested. Plates are also more inquired for, and are now quoted at from 8s. 15s. to 10s., according to brand. Other descriptions of malleable iron are reduced in proportion. The lap-welded tube works, near Coatbridge, are well employed, and the tin-plate works in the same locality (which were recently extended) are fully employed. The pipe and railway chair foundries of the bankrupt estate of the old-established and striving Phoenix Ironworks, Garscube Road, were offered for sale at 33,000£, without finding a purchaser, and they are to be re-exposed for sale here on the 23d inst., at a further reduced upset price. The business in the Pig-Iron market this week has been limited, but prices have scarcely varied a penny per ton, makers being of opinion that if there is to be any change at all they must go up; and sellers are indisposed to allow prices to go backwards. The shipments of the week are confined to 5810 tons, against 7650 tons in the corresponding week of last year, being an apparent decrease of 1840 tons for the week, and a decrease in 1867 of 3590 tons; but the furnaces in blast are only 98, while in the same week of last year there were 134 in full operation. To-day there was more disposition to sell, and at the close 54s. 6d. cash, and 54s. 9d. one month, were the terms. No. 1, g.m.b., 54s. 9d. to 55s.; No. 3, 54s. 3d. to 54s. 6d.; No. 1, Gartsherrie, 66s.; No. 1, Coltness, 65s.; No. 1, Glegarnock, at Ardrossan, 61s.

Coals are in good demand for home use, and the present very keen frost is assisting consumption. The shipping demand is inactive, unless by coasting vessels and small craft, which have been freighted for near Irish ports. Some of the ironmasters are offering their surplus out-put at a reduction, and by the beginning of Feb., if not earlier, a general reduction is expected to take place on all classes of coal.

The shipments are altogether 25,458 tons, which is regarded as large for the season of the year. The reduction in the colliers' wages has not yet become general; and when it does come, if that "flambeau of philosophy," secretary McDonald, gets the men to follow his advice, they will meet the proposed reduction by still further restricting their hours of labour, and he will no doubt endeavour to persuade them that by working three days a week instead of six they will have gained some 16s. to 20s. per man extra by the end of the year. Mr. McDonald's gains, to be understood, must be all judged of by the "rules of contrary." There are to be several meetings of miners this week on the wages question, and all that is wanted is a wise head to direct them to a considerate issue.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JAN. 17.—There is less probability of a strike than appeared last week. The Millmen's Association have decided to accept the reduction, with the proviso that it is not to exceed 10 per cent. in any case; and that when the advance of wages was, as is alleged, only 5 per cent., the reduction should not exceed that amount. A meeting of the Puddlers' Association, held at Brierley Hill, on Monday, resulted, it is understood, in a resolution in favour of resistance, but this awaits ratification. It is said, on tolerably good grounds, that there is a strong undercurrent of feeling amongst the men in favour of accepting the reduction, and there can be little doubt that this is strengthened by the severity of the weather. The prospect of a stoppage of wages during the existence of frost and snow is a very gloomy one. The North Staffordshire men, it is generally understood, will go in without a struggle; and, on the whole, it seems highly probable that the puddlers of South Staffordshire will not do more than play for a short time, or, possibly, stop one or two works. There is no improvement to report in the state of trade, which is very dull.

The enquiry as to the lamentable accident at Talke, in North Staffordshire, is still proceeding, having been adjourned from to-day until the 31st inst. The evidence adduced so far gives great force to the glaring defect which has been pointed out in Inspectors' reports in these letters, and in other ways, in the working of mines in Staffordshire—namely, the want of discipline. The mine, especially parts of it, was liable to frequent emissions of gas, very variable in amount. The further evidence taken at the inquest proves that Mr. McDonald's statement as to the habitually dangerous state of the mine was substantially correct, and it is much to be regretted that the Miners' Union officers did not think it worth their while to lodge a formal complaint with the Government Inspector, which could have been referred to in case an accident occurred, and which would, no doubt, in this case have been the means of saving a fearful sacrifice of life. Mr. McDonald remarks in his letter to Mr. Wynne that "should the jury be all of the stamp of the one that roared out when you mentioned my statement, then the verdict is known already;" and judging from the circumstances that the foreman of the jury (the Rev. M. W. Hutchins) has positively stated that he is intimate with Mr. Johnson, the manager, and that the jury loudly applaud (by stamping their feet, and otherwise) anything said by a witness in favour of the manager and underground bailiff, their verdict, whatever it may be, will not be worth the paper it is written upon. It is difficult to understand how a clergyman can accept the position of juror, when he knew the question to be raised was whether an intimate friend was guilty or not guilty of manslaughter. The evidence adduced has exposed a system of recklessness and incompetency in management rarely deplorable, and it is to be regretted there is not, as in the case of similar carelessness at sea, a legal mode of publicly degrading those so unwisely entrusted with power. The mine was known to be fiery, yet the whole ventilation was guided by a single door. The air was brought down 200 feet after passing through the workings; but in the opinion of Mr. Coe, colliery manager to Mr. Robert Heath, it did not in this particular case argue any want of skill. The men were allowed to brush out the gas from their working places, and the firemen re-lighted lamps in the return air. Yet, "taking all circumstances into consideration," Mr. Coe "would have carried on the workings in the same way that they were carried on." Heaven protect us from working in a pit managed by either Mr. Coe or Mr. Johnson.

From the evidence of Mr. Wynne, the Government Inspector for the district, who was one of the most energetic of the explorers after the calamity, and who, with his able colleague, Mr. Evans, has thoroughly inspected the pit, it appears that "the downcast shaft is about 95 ft. area down to within about 15 ft. of the main levels of the Seven-foot, from whence there is an incline down to a scaffold over the tunnel that is driven from the upcast shaft to the downcast. In this scaffold is an opening of about 30 ft. area, through which the air comes into the tunnel, and thence it is turned by double doors into the main upflow intake, which conducts the air to the highest part of the workings. It is then conducted by doors and brattice cloth into the numerous new cuttings that are being worked forward, and thence down to the main level at the far end. It then returns some distance towards the upcast, but doors are placed in this level to turn it down to the lower ones, where it was carried by brattice cloth to the far end, and thence through the tunnel to the bottom of the upcast shaft, which is down to the Eight-foot mine. The downcast and upcast are used to ventilate two other mines. At the Ten-foot, 168 yards from the surface, there is an opening of 42 ft. area; at the Two-rows, 200 yards deep, one of 72 ft.; and at the Seven-foot Banbury, 310 yards, one of 30 ft. The upcast has an area of 95 feet, with somewhat similar openings, at depths rather less than the downcast, owing to the dip of the mine; but this shaft is down to the Eight-foot Banbury at 350 yards, where there is only a small amount of work done. In the two upper seams there is a considerable amount of work going on, ventilated by means of these shafts; but a furnace is placed in each to increase the volume of air passing, so as to enable them to split the current into such quantities as the necessities of each mine may require. The explosion took place at or near the far end of the lower pair of levels, where the clearest traces of the fire are to be seen, and extended along those levels, dividing at the junction of the tunnel and fig. driving everything before it. When the fire reached the top of the brow it smashed the door between the two pits, and the one at the mouth, but this offered sufficient resistance to turn aside the blast, and send it up the main fig. towards the upper workings, where the flame must have been very great to set fire to the stable. Beyond the top of this fig. there are no traces of fire, but the blast may be traced far beyond this point, but owing to the openings being so large the resistance was much less. Consequently the blast was scarcely felt in the back workings, one man coming out to see what was the matter. And I may here remark, that if the poor fellows had made for these workings instead of the main fig., many lives would have been saved. The force of the blast must have been very great all along the tunnel, and in the 7-foot workings beyond the fault, where all the doors were broken, and all stoppings blown away, whilst the sump at the bottom of the pit was struck with broken timber, and so that the cage could not reach the landing place, which made the work of rescue most tedious. There can be but little doubt in the minds of those persons who examined the mine after the explosion that it occurred in one of the lower parallel levels, and was caused by the smoking of tobacco, the opening of a lamp, or the firing of a shot; but, in my opinion, the real blame does not rest on the men who did either of these things, as much as on those who had the care and control of the mine. When the shaft was sunk to the 8-foot Banbury, the downcast should have been sunk also to the 7-foot, to give a free current of air to the 8-foot, the new workings above the fault, and all below the main 7-foot level, leaving all above to be ventilated as at present, and not attempt to force air after it had been a vertical height in the workings of 220 feet, down from its natural outlet to workings 120 feet still deeper. About 12 months ago the water rose in the lower inclines, and caused the floor, or thill, to swell or rise, and when the water was got out the main fig. was cleaned for the purpose of sending coils down to the tunnel, but, unfortunately, the air-way, or back dip, was not cleaned, and, consequently, the lower levels would be always in a dangerous state, and ought not to have been pushed forward. It appears that danger was foreseen, a new dip driven downwards as far as the water would allow, when another was commenced to be driven upwards, and would have been thrived in a few days. In many places the main air-ways are contracted to an area of 16 feet, which is at all times objectionable, but the more so when the chances of leakage are so great, and the length of the current so unreasonably long, as by that means the air becomes so attenuated, and so loaded with noxious gases, that it becomes useless as a ventilating medium in the later places it enters. The discipline of the pit must have been most lax, or smoking could not have been carried on to the extent it was without something being done to put a stop to it; nor could surreptitious lamp-kys have been the rule, and not the exception, as it is now proved to have been the case, without these in authority winking at it; nor could shots have been fired in a well-regulated colliery in the loose way they appear to have been fired here. I am told that a small split of air was passed through the stopping or door on the main level to go down the fig. with a door at the bottom to turn it along the upper of the two levels. Now this was useless for the purpose intended, or perhaps worse, as it took off the pressure from the almost closed air-way, and every time the tubs went through the shaft, the fig. the whole of the current was liable to pass away to the upcast shaft. With such a mode of ventilation it was highly improper to open so many new places at the same time, releasing gas at every strike with totally inadequate means to carry it away, and more particularly the lower levels, which have been at all times highly dangerous. I, therefore, am of opinion, that the explosion was caused by the want of power to ventilate the lower workings, that this work should not have been pushed forward until the pit was sunk, and above all not until there was some means of ventilating it, which does not appear to have been the case. But I may here add that, had it not been for the great barometrical fluctuations during the few days preceding the explosion, the barometer on Tuesday morning showing a pressure equal to a column of mercury of about 30.34 in., and on Thursday one of about 29.34 in., it is possible the danger might have been averted until the new air-brow was completed. I think it but just to state that every facility has been afforded me to arrive at the truth, and I do not believe that Mr. Johnson has withheld any fact that was material to the elucidation of this melancholy affair. As regards those brave men who assisted in exploring the mine, no words can express the admiration I feel for such heroism, for I witnessed men with a full knowledge of their own danger groping in the dark, over dead men, in the strong hope of rescuing a living one; and what was the most admirable of all, a sense of their own danger did not cause them to disobey a single order that was given.

Mr. Evans, Government Inspector for the Derbyshire district, deposed that in his belief gas had accumulated in the lower workings, and that it was fired by the introduction of a naked light. The accumulation was due to a deficiency in the supply of air. He thought that taking one current of air all round the workings and back into the deep levels was not good management, and ought not to have been done. He had never before met with a mine in which the discipline was so bad as in this. Shots were fired by anybody, at any time; and men were allowed to go into workings where it was known the gas was; and

the lamps were re-lighted in the return air. The explosion was as much due to the lax discipline as to anything else. The underground manager ought to have known what was going on. He did not believe Mr. Johnson, the general manager, knew. If Nichols said he did not know, he believed him; but he ought to have known it.

It is certainly to be regretted that workmen have not the courage to state what they know with regard to accidents, but that they have not is proved at almost every inquest. The jury at Talke, however, showed a strong bias in favour of the management, and when Mr. Coe, manager of the Biddulph Valley Collieries, expressed his opinion that a great deal of credit was due to Mr. Johnson, the general manager, and to Mr. Nicholls, the underground manager, the jury expressed their approval by stamping on the floor. Possibly those gentlemen deserve the credit given them, but certainly the jury hardly showed that state of mind which waits to hear all the evidence, and seeks only to discover the truth. It is most earnestly to be hoped that the information Mr. McDonald has to give should be placed before the jury and the world, so that if there is blame it may fall on the right shoulders; and, if the information is untrue or exaggerated, it may be refuted.

The great question is how can discipline in collieries be improved? Here are a lot of men working under regulations designed for their own safety, yet many of them habitually disregard them, and no one reports such violations to those in authority. It is evident that the popular feeling is either against these precautions or is listlessly indifferent. Everyone knows how entirely in a question on which they feel a deep interest a minority of workmen have to yield to the majority, yet here what endangers human life was regularly done with impunity, and not a single man felt it his duty to report. How can this be altered? Until it is, regulations are vain, and mine inspection comes to little. The men think little of an unseen danger; they set aside precautions for their safety, and those over them wink at their disregard of the regulations which are supposed to be in force. Nothing but an improvement in the miner's mind, the cultivation of his reflective faculties, will awaken that lively sense of possible accident which will give constant value to prudent precautions, which experience has shown to be necessary to avoid danger. Amongst the work which the leaders of Miners' Unions strive to effect, can they not encourage a popular feeling in favour of the strict observance of colliery regulations?

THE COLLIERS' STRIKE IN THE ASHTON DISTRICT.—At a meeting of the Coalmasters' Association for the district of Ashton and Dukinfield, on Thursday, after considerable discussion, it was resolved:—“That, in consequence of the severity of the weather, and the impossibility of the public obtaining an immediate supply of coal, the demand of the men should be acceded to, the masters having determined, unitedly, at an early period to reduce the price of coal, and lower the wages of the men to the same level as those in the surrounding district.”

The Insular Meeting of a society—the CORPORATION OF MINE AGENTS OF SOUTH STAFFORDSHIRE AND EAST WORCESTERSHIRE—which, if developed with judgment and integrity, may become one of the most important means of securing safety in the working of collieries, will be held at Dudley, on Monday; but, unless the objects of the association, as stated in the proposed Memorandum of Association, be greatly curtailed, it may easily degenerate into a Trades' Union of the most objectionable form. It is proposed to set forth the objects as:—“The improvement of the practice of mining, the discussion of all matters relating to such practice, and the protection and aid of the members in all matters connected with their practice;” but it is not difficult to see that the italicised portion would permit of the legal defence of any member for careless management of the collieries committed to his charge, and, as it does not appear to be intended that the “corporation” shall be a limited company, each member would be personally responsible for the whole of the expenses incurred. The association professes the intention to work in harmony with the Government Inspector, and to assist him in rendering the mines safe, but they intend resisting any attempt to unduly impose upon them the responsibility of all the rules, both general and special. The rendering of the chartermaster or his deputy (where no other person competent to undertake the duties imposed upon them is appointed) criminally liable for every detail connected with the workings, is the sole means of securing discipline, which is so much wanted in the South Staffordshire and East Worcestershire district; and it should be remembered that, far from such a state of affairs placing the chartermaster in jeopardy of continual prosecutions for manslaughter, as the promoters of the “corporation” seem to anticipate, the whole of the dreaded difficulty would be met by each chartermaster formally appointing subordinates to do the necessary work, making the appointment in such a way that each comprehends the exact work he has to do or to superintend, and knows that a penalty attaches to him in case of neglect. The object of all responsible for the safety of collieries, from the Secretary of State downward, should be “indivision of the responsibility,” but this the projected association takes full power to use its best endeavours to prevent.

REPORT FROM NORTHUMBERLAND AND DURHAM.

JAN. 17.—The Coal and Coke Trade continues good, the demand for all kinds of fuel being excellent, and the prospect for the year just commencing is, therefore, most cheering. The weather since the opening of the year has been of the most severe character, and is now apparently, settled into a regular arctic winter. The trade has been much impeded by falls of snow blocking up the roads and railways, and the shipping has also been much obstructed by boisterous weather at sea, and many wrecks have occurred on the coast. Some of the engine works and foundries are extremely busy, mostly in executing colliery orders; while, on the other hand, general shops, locomotive, and other works are dull enough. The alkali business, too, is hardly so brisk as it was a short time ago, yet still a good business is being done. The Iron Trade generally, although still considered very dull and flat, is not without hopeful signs for the future; the make of pig-iron in the north-eastern district during the past year amounted to 1,043,527 tons, the make during the previous year having been 1,033,646 tons, and, considering the late strikes, the quantity is enormous. The stock at the end of 1865 was 76,905 tons, and at the end of 1866 the stock is 157,321 tons, or a little more than double the former stock. The total quantity of pig-iron made in the great old iron field of West Scotland, in 1866, was 994,000 tons. The comparatively new field of Cleveland, added to the old fields of Northumberland and Durham, has, therefore, already surpassed in make this important field in Scotland. The stock of iron on hand in this district, as compared with that on hand in Glasgow, is trifling; it may, therefore, be confidently expected that an improvement will shortly take place in this important trade. The price of pig-iron in this district ranged during the year between 61s. 6d. and 48s. 6d. per ton for No. 1, and from 63s. 6d. to 52s. 6d., free on board in the Tyne, and from 2s. to 2s. 6d. per ton less for No. 3. The opinion appears to gain ground that the principle of co-operation will be much extended in connection with the iron trade, and that the disastrous strikes which have hitherto occurred so frequently, and which have so seriously retarded the progress of the trade, will by this means become more rare, if not entirely extinct. A company has been introduced of this kind, with every prospect of success at Darlington, and the locality is certainly well chosen, as all the raw materials required can be had there readily and cheaply.

A melancholy accident occurred at Beamish Colliery, which resulted in the death of John Urwin, one of the agents, serious injury to Mr. Kay and Mr. Bryden, officials, and one of the workmen. The cause was from Beamish Colliery to the main line by means of a self-acting incline, at the bottom of which was situated a temporary office, in which Mr. Urwin, Mr. Kay, Mr. Bryden, and a workman were sitting. In consequence of the frost and the accumulation of snow, the apparatus on the incline had got out of order, and the men had been unable to get all the coals away for several days. From some cause or other the apparatus broke, and some of the wagons rushed down the incline at a fearful speed into the temporary office, smashing it, and severely injuring Mr. Urwin, Mr. Kay, and Mr. Bryden. Mr. Urwin died soon afterwards.

At Messrs. Straker and Love's Sunnybrow Colliery a dreadful boiler explosion took place on the 2d inst. The boiler was 33 feet in length by 6 feet diameter, and it blew up with most tremendous force, splitting into three portions, and scattering bricks and other materials in all directions. The engine-house was almost entirely demolished, only one wall being left standing, and the workshops being also much injured. One fragment of the boiler was deposited in a field 1½ mile distant from the works. The poor fireman was killed on the spot, and also two others, the names of the poor men killed being Matthew Farnaby, George Young, and B. Webster; and three others were also severely injured. Communication was entirely cut off from the men in the workings by this shaft, but they were got out by means of another shaft. Altogether this explosion has been one of the most disastrous and fatal on record. The adjourned inquest on the bodies of the three men killed was held at Willington, on Wednesday last, when a lengthy investigation took place. The first witness called was William Thomas, the manager to the Wearside Iron Company. The boiler in question had been in the possession of the Wearside Company about 21 years, and had been worked a great part of that time by them. This witness attributed the explosion to the expansion caused by the boiler being set to work suddenly after severe weather. The severe frost would contract the iron very much, and the rapid heating of the boiler would cause it to expand. The boiler, under ordinary circumstances, was quite capable of bearing 35 lbs. pressure per inch. (A letter was read from the Manchester Boiler Insurance Company, which stated that the No. 1 boiler had been examined while at work at Tow Law, and about a month before it was sold, when it was perfect in every way.) Mr. Watson, engineer of Black Boy, said that he did not see any signs of overheating in the boiler, and did not think that it had been overheated. He attributed the

cause of the explosion to a defect in some of the plates. George Hopper, iron manufacturer, of Houghton, was sworn. He was quite unable to form any opinion as to the cause of the explosion. He did not think that atmospheric influence would cause it. There was no gauge to show the pressure of steam on this boiler, therefore the only means of ascertaining the pressure was by means of the lever on the safety-valve. Mr. Soudley, the engineer, was recalled, and he said that it would have taken at least two or three hours to put the gauge on. He had no orders to work without steam-gauges. The jury, after deliberating about half-an-hour, returned the following verdict:—“The jury are of opinion that the deaths of the three persons were caused by the explosion of the No. 1 boiler, at Sunnybrow Colliery. The jury do also recommend that more care be taken by all in authority about the colliery for the time to come.”

REPORT FROM MONMOUTH AND SOUTH WALES.

JAN. 17.—It is to be feared that the word “depression” will have to be used for some time yet in describing the state of the South Wales Iron Trade, as there is no sign of any immediate improvement taking place in the demand. All makers can do is to hope that, with money cheap as it is, the really low prices accepted for almost all description of manufactured iron, and the heavy requirements of consumers, a stimulus will be given to trade ere long by the placement of orders in the market more freely. The slight increase in the feeling of confidence which was beginning to manifest itself has received a check by the announcement that the Ebbw Vale Iron Company (Limited) have decided on stopping operations at their Brendon Hills Mine, and that two or three of the ironworks in this district are in the market. On the other hand, it is gratifying to find that the Plymouth Ironworks have taken a fresh start, in consequence, it is said, of some orders having been secured, and the hands have nearly all resumed work. It appears that, by the arrangement entered into between the partners of the Tredegar Ironworks, that Mr. Forman will retire from the concern altogether. The company consisted of 24 shares, divided as follows:—Mr. Forman, 10½; the Messrs. Homfray, 8; and Mr. Rowland Fothergill, 5½. The Messrs. Homfray will take the 10½ shares of Mr. Forman, and thus become owners of more than three-fourths of the works. It is understood that Mr. Samuel Homfray will take the general supervision of the establishment, and several important changes will be made in the management. No steps have been taken in the Monmouthshire portion of the district with regard to a reduction in wages, and the men are in hopes that something will spring up to prevent any alteration being made in the present rate. The late severe weather has greatly interfered with shipping operations, and during the past fortnight the quantity of iron cleared out for the foreign markets has been below the average. A few contracts have been placed on American account, and the advices from New York continue of an encouraging character; and, should political affairs have no deterrent influence upon the industrial trades of the country, the demand for the present year is expected to be more active than during the past year. According to the latest advices received, there is every probability of iron being in great request at most of the other foreign markets, Russia taking the lead, followed closely by Italy, where the condition of credit is steadily righting itself. In India, public works, railways, &c., are likely to be pushed forward, and it is expected that railway operations will be carried on briskly in Australia. For pig-iron there is a dull sale, and quotations are nominal. There is a better enquiry for tin-plates, and the opinion is that an improvement will take place in the demand as the quarter advances. Steam coal proprietors are well supplied with orders, but the severe weather, and the scarcity of shipping on offer, has somewhat lessened the exports; still a large business is being done with the continental markets and the mail packet coaling stations. There is, however, a slight falling off in the demand from some of the foreign markets. The inland trade is brisk, and business with the London markets is gradually increasing. For house coal there is an average enquiry, and the collieries are pretty regularly employed.

The Tylda Wen Colliery Company is to be wound-up voluntarily. The Llantrissant Iron and Coal Company's petition for winding-up came before the Master of the Rolls on Saturday; and, on the application of Mr. Jessel, the consideration of it was adjourned for a fortnight. An extraordinary and fatal accident, by which two men lost their lives, and five others were seriously injured, has occurred at one of the pits worked by the Dowlais Iron Company, near Merthyr. It appears that a party of seven men were in the tram, which was about being lowered to take them to work, when, from some at present unexplained cause, the engine was suddenly reversed, after the men had descended about half-a-dozen yards, and the tram was violently wound up, striking with great force against the beam on the top. Two of the occupants were thrown out, and fell the full depth of the pit. The other five managed to retain their hold on the tram, but were dreadfully crushed. As soon as the machinery could be re-arranged the tram was lowered, but the two men who had fallen out were, of course, dead. Their bodies were frightfully mangled, and it was found necessary to place them in a sack before bringing them to the top.

Messrs. J. and C. Bailey, of Nant-y-Glo Ironworks, have commenced shipping coal from Nant-y-Glo at Newport. This is another instance of our large ironmasters entering the steam-coal market, which they doubtless find far more profitable than the manufacture of iron.

Possession was not taken, as expected by the new proprietors of the Aberaman Works on Jan. 1, but, most probably, they will take possession on February 1.

An extraordinary meeting of the Ebbw Vale Company (Limited) was held on Tuesday, to pass a resolution in favour of creating 400,000l. of 6 per cent. preference shares, as well as to sanction the directors' proposal to reduce the nominal amount of the shares from 50l. to 30l. After a long discussion, however, it was decided not to agree to these propositions at the moment; and with the full consent of the directors, a committee consisting of Messrs. E. E. Langway, E. E. Langway, J. Phillips, R. Longdon, Jun., and Mr. Curtis, was appointed to examine into the affairs of the undertaking. The committee will report at an adjourned meeting to be held on Feb. 6.

A case of some interest, as affecting the rights of tenants for life under settlement to work minerals, has been decided by Vice-Chancellor Wood. The plaintiffs were Colonel Stepany and his two sons, owners of the Stepany estate, Llanelli, and the defendant was Mr. William Chambers, who is the executor of a late tenant for life of the estate, who was not by the terms of the will of the settlor authorised to commit waste. On coming into possession of the estate, however, he granted the lease of all the coal under certain farms forming part of the estate, and the suit was instituted for the purpose of recovering the shares of the estate. The defendant contended that the mines were open ones at the date of the settlement, and that it was consequently not waste in a tenant for life to work them; and in support of his view he proved the existence on the farms of an old trial pit and a very considerable amount of superficial working at the outcrop of the various seams of coal on the side of the mountain. The Vice-Chancellor, however, held that workings of this description did not amount to an opening of the mine, and gave the plaintiffs a decree, with costs.

The arrivals at Swansea include—the Oscar, from Drammen, with 150 tons of copper ore, for Vivian and Sons; the Tongoy, from Huasco, with 750 tons of copper regulus, for H. Bath and Son; the Lohikosi, from Malaga, with 146 tons of zinc ore for G. E. Bird and Co.; and the Delaware, from the West Coast, with copper ore for H. Bath and Son.

FOREST OF DEAN.—The accounts given at the various works of the state of trade continue to be very satisfactory—indeed, orders “roll in” by every post, and all kind of products are eagerly caught up. The iron trade is exceedingly brisk. The depression in other markets has certainly made no visible alteration here. The Cinderford iron furnaces are in full work. The orders during the December month were particularly good, and the exports from these furnaces were correspondingly heavy. The returns show pig-iron sent per boat from Bullo, 496 tons; to South Wales, 707 tons; and to Staffordshire, 530 tons. It should be borne in mind that no freightages have been taken from the Soudley furnaces, as they are under repairs. The iron ore exported from the Hedge Hills pits to Dowlais during the same month was 2560 tons, and there is another item of 984 tons to various markets. The coal returns for the month, this side of the Forest, have been very good: sent per boats 5360 tons, and by rail to home markets 22,699 tons. The last return of coal from seven principal collieries on the Cinderford side for the year amounted in the aggregate to 448,387 tons; this does not include numbers of small collieries, who raise a proportionate quantity of coal.

The question of roads for the Forest will be now duly considered by the Local Board for East Dean, the first sitting of which took place at Cinderford, on Wednesday. The fact that the principal coal and iron masters in the township are members of the board is a sufficient guarantee that any lavish expenditure will not be tolerated. The roads are in a disgracefully bad state; little, we should think, has been done to them for centuries, excepting the Gloucester and Coleford roads. There is not one in East Dean that is scarcely passable. The present high poor-rates are as much as the majority of the papers—who are colliers and miners—can manage. As an illustration of the foregoing remarks, it may be stated that the Bilson and Crump Meadow Company paid last year for poor rates 397l.; the “Lightmoor,” 360l.; and “two others,” 299l. It will be seen, then, that if a great outlay is made by the Local Board, much as it is needed, colliery proprietors will feel the burden the heavier. The state of the roads in the neighbourhood of Cinderford are so bad that it is astonishing how accidents are avoided. A large town is springing up here.

Another fatal accident has occurred at Mr. Walmer's pit, at Ruspide, to Thomas Faulk, aged fifty years. The deceased was working at a heading, and some coal falling from the roof killed him. It will, perhaps, be remembered that about a month ago at this pit a young man, named Jenkins, was killed,

and, singular to relate, the present deceased man was killed on the same spot in a similar manner, at the same hour of the same day of the week. It is only fair to mention that no blame whatever is attached to the proprietor, who spares no expense in timber. The fact, if any, is attributable to the men, who are not sufficiently careful to secure the roof or the workings before they proceed to their labour. These accidents are of frequent occurrence in the district.

A great loss has been experienced by the Foresters in the death of the Rev. Mr. Nicholls. The name of this gentleman, who a few days since died in London, is not only widely known in this district, but throughout the land. It will be remembered that, in addition to parochial work, he sought in many ways to improve the condition of the unenlightened Foresters. Mr. Nicholls's name is very widely known as the author of several works. The first being “The Forest of Dean,” in which an historical and descriptive account is given, derived from personal observation. The work evidently shows great research and labour. The second volume is “The Personalities of the Forest of Dean,” being a relation of its successive officials, gentry and commonality. An appendix contains a biographical sketch of the more prominent men of the Forest. This production, and which was only published in the summer of last year, gives an account of the iron-making in the olden times, as instanced in the ancient mines, forges, and furnaces in the Forest of Dean. Funeral sermons were preached at Holy Trinity, and at Drybrook on Sunday, one of which at the deceased gentleman's church, by one of his oldest friends—the Rev. James Davis, rural dean of Abinghall, who is also a Forest writer of great repute.

The offering of a Forest of Dean colliery plant for sale, under “peculiar” circumstances, is of somewhat rare occurrence. Nevertheless, such was the case a few days since. It turned out to be the High Delf Colliery Company (Limited), situated at Ruardean, Woodside, being under a distress for a Crown rent. The sale did not take place, the cash having been paid down that same morning.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

JAN. 17.—Perhaps the most singular matter to notice in the history of the mining of this county is the very extraordinary fact that the attempt to form a Miners' Association in Derbyshire, and so to some extent fix the rate of wages and the hours of labour, has met with the greatest opposition from the very parties who it was expected would have been its warmest supporters. Some three months since the men at Staveley and Clay Cross determined to form a Union, at the instigation of the Yorkshire Miners' Association, and to some extent were successful; but the men having commenced to think for themselves, the seceders became numerous, so that at a meeting held on Tuesday night, at Staveley, it was announced by the Chairman (Mr. Markham, the managing director of the Staveley Company) that no less than 1508 persons exclusively employed in the mineral department had no connection whatever with the Union. This is the first effort which has been made in the kingdom by the working men to free themselves from the thralldom peculiar to Trades' Unions, and appears likely to be every way successful. Mr. Markham observed (alluding to Trades' Unions) that these gigantic combinations could do no good to the working man, as they were usually followed by similar combinations on the part of the masters, and he believed that capital would always succeed in such contests. He reminded them that the South Yorkshire Miners' Association showed by their own report that they had received 10,000l. from the men, out of which only 1858l. had been appropriated to accidents, sick, and provident purposes, whilst 4977l. had been appropriated to strikes, and the remainder to other purposes. He would be delighted to see the establishment of a national benefit society, to which every working man should subscribe as well as the masters, and that the masters and workmen should shake hands over such a national society, and should both endeavour to benefit it to the utmost extent. He had observed that Mr. Bright had endeavoured to induce the Trades' Unions to enter into a combination for the purpose of reform, but he (the Chairman) was pleased to see from a recent meeting of some of the trade societies at Sheffield that some of the members had rebelled against it, and had stated their opinion that trade societies should not be used for political purposes.

With regard to the general trade of North Derbyshire, notwithstanding the strike, business continues active. The iron trade will contrast favourably with any other district in the country, there being some good orders in hand for gas and water pipes, as well as for sheets, hoops, and plates. All the coal that is now raised in the district meets with a ready sale, and so active is the trade that coalmasters are unable to keep up with the demand, occasioned, to some extent, by the severity of the weather. There is very little alteration in the state of the Sheffield trade, the orders for the spring delivery not having come in to any extent, still some of the houses in the steel business are kept fully going. The dispute at the extensive ironworks in Yorkshire, where the men refused to submit to the 10 per cent. reduction, has to some extent been modified. At Parkgate, at an interview with the managing director, it was agreed upon on Tuesday that work should be resumed at a uniform reduction of 10 per cent. At Elsecar and Milton, where the men were out for a week awaiting the decision of the Parkgate men, business has been entirely suspended, and the Messrs. Dawes have given up the few orders they had in hand, showing that the trade is in such a state that manufacturers are prepared to put down their works rather than concede prices that the state of trade will not admit of.

The Coal Trade continues active, and the orders from the London and Southern markets, owing to the severity of the weather, are fully equal to the ability to supply, so far as house coals are concerned. The Baltic ports being now closed from Kiel, there is not so much steam coal sent out from the district, so that at some of our largest collieries stacking has commenced. Slack and smudge for engine fuel and coke making purposes continue to be in active request.

The progress of the inquest at Barnsley seems to add to rather than diminish the mystery surrounding the Oaks explosion. Mr. Milne, under-viewer of the Mount Osborne Colliery, one of the volunteers, deposed that from what he saw he thought the explosion had taken place in the South Level. The blast appeared to have gone from the south to the north, from the bottom upwards, and the archways were blown upwards. There was every indication that the blast had gone in a contrary direction to the intake air. The bodies and lamps had been blown out of Thompson's box-hole, which is open at both ends into the engine plane. When he was under-viewer at the Oaks he found gas in No. 7 district, but it could not be got rid of. In a fiery mine like this there are trains of gas along the roofs of the mine, though the main gas is not perceived, and an explosion in the south level would have put all the trains in motion all through the pit, and thus render the explosion continuous. If an explosion had been caused in the return air-course by the shot the doors, which were left standing, would have been blown away. John Platts, under-viewer of the Wharfedale Silkstone Colliery, confirmed this evidence. On the other hand there is the very important evidence of William Ward, who is the only living member of the deputation who complained, on behalf of the miners, of the ventilation of the pit. The witness was on Nov. 29. Mr. Dymond reported that Charles Webb had stated that his place was hot, and had shown his arm, which had been burnt by his lamp. Mr. Dymond was very angry, and said they had plotted it all, because they had been at play that day. About 120 Oaks miners had attended a meeting the previous night. Mr. Dymond said that if the complaint were correct it could be ascertained by an examination of the lamp; and added that he had his capital at stake as well as the men's lives, and he was bound to go and see if the fact was as they had reported it. He asked them to go with him, and two members of the deputation went and fetched the men who had complained. They then went down the pit. Mr. Dymond sent for Sugden, and he joined them in the box-hole. The lamp-gauges were burnt, blue, and Mr. Dymond said they had been too hot. At Andrew Barker's (one of those who complained) place they found no gas, but it was very hot at the face. Mr. Dymond told Andrew Barker that he had been getting drunk, and was not fit to work, but Barker said the place was too hot for any man to work in, and it did him up in three hours. In cross-examination, Ward admitted that the deputation mentioned the taking off 1 cwt. per ton before he mentioned the bad ventilation; that he heard some of the deputation say that Barker had exaggerated in saying that he had fire in his lamp all the time he was working. The principal witness examined to-day (Thursday) was Mr. Philip Cooper, under-viewer for the Mashro, Rotherham, and Holmes Colliery, and who deposed that the pit shortly after the accident. He gave it as his opinion that the explosion took place on the south side of the pit, from the neighbourhood of what is known as Thompson's box-hole, and then proceeded to the engine-plane. He did not think it could have originated at the south-east return at the foot of the steps, as the channels which unite the three levels on the south-east side were such as would be the natural outlet, there being no barrier to separate from the other. Looking at the engine-plane, there were open channels on the south side, and the three levels, it might be said that the state of the explosion presented a complete continuity of open channels round the district where it appeared to have been most violent, with the exception of one pair of doors. The devastations, as far as he saw, was very great in the north top pass, but not so severe as on the south side. It appears evident that an attempt will be made to fix culpable negligence on the proprietor, with a view of obtaining compensation for the widows and children. This is more apparent from the fact that the Marquis of Townsend has got mounted on one of his very peculiar “hobbies,” and has instructed the well-known firm of Shaen and Vesceux, watch by counsel the enquiry now taking place, with a view to ultimate proceedings.

A meeting of colliery proprietors and others has been held at Wakefield, to consider in what manner the proportion of the surplus of the Hartley Colliery Accident Relief Fund allotted to the mining districts of Yorkshire should be appropriated. The amount, including interest, is about 2500l., and strong feeling has been expressed in favour of the proposal to retain it in the hands of the trustees as the nucleus of a permanent fund for providing relief to the sufferers from colliery accidents. There is also in hand a sum of about 600l. from the Oaks Relief Fund of 1847; and the two amounts, it is thought, might appropriately be devoted to this purpose. The meeting decided to appoint Fitzwilliam, Lord Wharfedale, and Viscount Halifax trustees for receiving the Hartley surplus, and a committee was chosen to decide definitely on the appropriation of the fund.

CHARLES CAMELL AND CO. (Limited).—As the vast extent of the establishment under the management of this firm is not generally known, we may state that, in addition to the Penistone Works, they have the Cyclops Grimesthorpe Works, Sheffield, employing about 3000 hands. The chief manufactures turned out at these places are files, railway springs and buffers, Bessemer steel rails, tyres, ship-plates, all kinds of steel forgings, armour-plates (iron), &c., the greater part of which are manufactured at the twolatter works.

The London Stock and Share Company sold the following shares at their sale by auction on Tuesday:—Anglo-Brazilian Gold Mining Company (Limited), 6s. 6d.; Antelope Copper Mining Company (California), 3s.; Brazilian Land and Mining Company (Limited), 7s. to 8s.; British Slate Company (Limited), 3s. 6d.; Don Pedro North del Rey Mining Company (Limited), 10s. 6d.; Specie Basis Mining Company, 3l. 15s.; Vallancasca Gold Mining Company, Limited (Italy), 15s. 6d.; Val Antigua Gold Mining Company (Limited), 8s.; Val Sasam Mines Company (Limited), 12s. to 17s.

NICHOLLS, MATHEWS, AND CO., ENGINEERS,
BEDFORD IRONWORKS, TAVISTOCK.
MANUFACTURERS OF STEAM ENGINES OF EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY MINERS' TOOLS and RAILWAY WORK of EVERY DESCRIPTION. ORDERS FOR ABROAD RECEIVE THEIR BEST ATTENTION.
NICHOLLS, MATHEWS, AND CO. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.
NICHOLLS, MATHEWS, AND CO. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

RAILWAY CARRIAGE COMPANY (LIMITED)
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, and EVERY DESCRIPTION OF IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES, OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES, 6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER.

THE BEVERLEY IRON AND WAGON COMPANY (LIMITED)
MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, WROUGHT AND CAST IRON CARRIAGE AND WAGON WHEELS, AXLES, HAMMERED IRON, and HEAVY SMITHS' WORK for ENGINEERS, &c. BRASS and IRON FOUNDERS. MAKERS OF PORTABLE FARM RAILWAYS, TURNING, CROSSINGS, SWITCHES, &c. AGRICULTURAL MACHINISTS. MANUFACTURERS OF FERRIS ROAD, and BARN IMPLEMENTS, PATENT ROLLING MACHINES, CLOD CRUSHERS, CORN MILLS, &c. SAW MILL PROPRIETORS. GENERAL TIMBER CONVERTERS for home and foreign RAILWAYS, STATIONS, BARRACKS, EXHIBITIONS, &c.
IRONWORKS BEVERLEY, YORKSHIRE.
JAMES DEWHIRST, Sec.

THE BIRMINGHAM WAGON COMPANY (LIMITED)
MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.
EDMUND FOWLER, Sec.
WAGON WORKS, SMETHWICK, BIRMINGHAM.
Loans received on Debenture; particulars on application.
London Agent—Mr. E. B. SAVILE, 67, Victoria-street, Westminster, S.W.

STAFFORDSHIRE WHEEL AND AXLE COMPANY (LIMITED)
MANUFACTURERS OF RAILWAY CARRIAGE, WAGON, and CONTRACTOR'S WHEELS and AXLES, and other IRONWORK, used in the CONSTRUCTION OF RAILWAY ROLLING STOCK.
CHIEF OFFICES, 3 and 4, EXCHANGE BUILDINGS, BIRMINGHAM.

GLAHOLM AND ROBSON,
HENDON PATENT ROPE, SUNDERLAND.
MANUFACTURERS OF ALL DESCRIPTIONS OF STEEL, IRON, and HEMP ROPES FOR COLLIERIES, SHIPS, &c.

INEXPLOSIVE BLASTING POWDER
(Invented by G. A. NEUMEYER)
CANNOT EXPLODE WHEN EXPOSED TO AIR!
ALL INTERESTED IN COLLIERY, MINING, AND ENGINEERING OPERATIONS are invited to TEST this NEW EXPLOSIVE COMPOUND, which meets with great favour upon the Continent, where it has been introduced nearly two years.
This powder combines STRENGTH with SAFETY to a degree never before known. It is more economical than ordinary blasting powder:—
1.—Because it is cheaper in first cost.
2.—It is lighter than the blasting powder now in use.
3.—The same bulk (which will be less weight) greater effect is produced.
ROBIN H. NEWBY is now prepared to register orders for the above. Particulars, post free, on application to the offices, 39A, King William-street, City, London.

NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.—The EXPLOSIVE FORCE of this BLASTING OIL is TEN TIMES that of GUNPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and opening forward in close ends is immense.
It will not explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton.
Being heavier than water it sinks to the bottom of a wet hole, no other tampering than water being required.
One charge of this blasting oil, which is now being used with wonderful effect in all the largest slate quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large quantity of good slate rock, shakes and displaces it at the natural joints, or cracks, without damaging the slabs nearly so much as the more numerous blasts from any other blasting material would do.
This invaluable quarrying agent may now be obtained from Messrs. GIBB and Co., Carnarvon, sole consignees from the patentee.

GARNOCK, BIBBY, AND CO.,
CHAPEL STREET, LIVERPOOL.
MANUFACTURERS OF FLAT and ROUND WIRE ROPES and IRON and STEEL WIRE ROPES FOR MINING, RAILWAY, and SHIPPING PURPOSES.
MANILLA ROPE OF SUPERIOR QUALITY, FIFTY PER CENT. STRONGER AND THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE OF FIRST QUALITY WIRE, and the HIGHEST STANDARD STRENGTH.
Patent Flat and Round Wire and Hemp Ropes, &c.

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ESTABLISHED 1770.
Manufacturers of every description of IMPROVED PATENT FLAT and ROUND WIRE ROPES, From the very best quality of charcoal iron and steel wire.
PATENT FLAT and ROUND HEMP ROPES, SHIPS' RIGGING, SIGNAL and FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel), WIRE, HEMP, FLAX, ENGINE YARN, COTTON WASTE, &c.
UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.
No. 2, OSWALD STREET, GLASGOW.
CITY OFFICE, No. 19, LONDON STREET, LONDON.

NEW WORK ON COAL MINING.
TREATISE ON COAL AND COAL MINING.
By WARINGTON W. SMYTH, M.A., F.R.S.,
Chief Inspector of the Mines of the Crown, and of the Duchy of Cornwall.
London: Virtue and Co., 26, Ivy-lane, Paternoster-row.

MR. JOHN BOURNE'S WORKS ON THE STEAM-ENGINE.
In one vol. of 700 pages, with 67 woodcuts, price 9s., cloth.
HANDBOOK OF THE STEAM-ENGINE; containing all the Rules required for the Right Construction and Management of Engines of every class, with the Easy Arithmetical Solution of those Rules; illustrated by numerous Tables and Examples, and forming a Key to the Author's "Catechism of the Steam-Engine."
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An admirable work, and a valuable addition to the engineer's library.
Its real scope is to educate up the workman, or any man whose previous knowledge is backward, to the point that shall enable him to read and understand, not only the Author's "Catechism," but almost any similar work on any other branch of mechanics, or of civil and mechanical engineering. The work is one of many and considerable merits."
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New and improved editions.

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TREATISE ON THE SCREW PROPELLER, PARTS I. to XVI. 2s. 6d. each.
London: Longmans, Green, and Co., Paternoster-row.

THE OAKS COLLIERY EXPLOSION.—A SERMON, preached in DUFFIELD CHURCH, DERBYSHIRE, by the Rev. F. W. MOORE, Vicar, on Sunday, December 23, on the occasion of the lamented death of PARKIN JEFFCOCK, Esq. Published by request of the sorrowing inhabitants of Duffield. To be had from Mr. REDFERN, Town-street, Duffield, Derby; or the publishers, BEMROSE and SONS, 21, Paternoster-row, London, and Derby.

THE COST-BOOK SYSTEM:
Its Principles Practically Considered. Embracing Suggestions for the formation of a Cost-book Mining Company.
By THOMAS TAPPING, Esq. of the Middle Temple, Barrister-at-law, and author of a Prize Essay on the same subject, and of many other works on Mining Law.
London: MINING JOURNAL OFFICE, 26, Fleet-street, E.C.

Tower-Sale of Stores.
BY ORDER OF THE SECRETARY OF STATE FOR WAR.
MR. GEORGE SPILLMAN WILL SELL,
BY PUBLIC AUCTION, in the Tower, on Tuesday, the 22d January, 1867, at Eleven o'clock in the forenoon precisely, the following STORES:—
SALTPETRE BAGS.
SURGICAL INSTRUMENTS.
HOSE PIPE.
ACCOUTREMENTS.
IRON.
CHAINS, FETLOCK.
77
May be viewed at the Tower from Ten to Four o'clock the three days previous to the day of sale, and catalogues may be had at the War Office, Pall Mall; the Tower; and Royal Arsenal, Woolwich.

India Office-Contract for Pig-iron.
BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL.
NOTICE IS HEREBY GIVEN that the DIRECTOR-GENERAL OF STORES for INDIA will be READY, on or before Monday, the 21st instant, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing to SUPPLY—
FIVE HUNDRED TONS OF PIG-IRON.
And that the conditions of the said contract may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M., of the said 21st day of January, 1867, after which hour no tender will be received.
GERALD C. TALBOT, Director-General.
India Office, January 12, 1867.

Museum of Practical Geology, Jermyn Street.
NOTICE.—OPENING OF THE MUSEUM OF PRACTICAL GEOLOGY, JERMYN STREET, in the EVENING.—This Museum will, on and after SATURDAY, the 19th January, be OPEN to the PUBLIC (free) on MONDAYS and SATURDAYS, from Ten A.M. until Ten P.M. By order.
Geology—King's College, London.
GEOLOGY—KING'S COLLEGE, LONDON.—
PROF. TENNANT, F.R.S., will COMMENCE a COURSE OF LECTURES on GEOLOGY on FRIDAY, January 25, at Nine A.M. They will be continued on each succeeding Wednesday and Friday at the same hour. A shorter course will be given on Wednesday evenings from Eight to Nine. First lecture, Jan. 25.—Text-book: Lyell's Elements of Geology. R. W. JELF, D.D., Principal.

TO COAL OWNERS, AND OTHERS.
THE LONDON PATENT COAL COMPANY are now GRANTING LICENSES for the USE of their PATENT for the UTILIZATION OF COAL DUST. All communications to be addressed to the Managing Director, 26, Martin's-lane, Cannon-street, E.C.

LONDON, CHATHAM, AND DOVER RAILWAY SECURITIES.—A SPECIAL AUCTION of these will be HELD on THURSDAY and FRIDAY, the 14th and 15th of February, at the London Tavern, Bishopsgate-street, by the LONDON STOCK AND SHARE COMPANY (LIMITED).
CHARLES CAPPER, M.P., Chairman.
J. WATSON KNIGHT, Deputy-Chairman.
Particulars to be had at No. 1, Royal Exchange-buildings, London, E.C.

THE LONDON STOCK AND SHARE COMPANY (LIMITED) holds WEEKLY AUCTIONS of STOCKS and SHARES, and publishes a CIRCULAR for the use of investors, which may be had on application, postage free.—Offices, 1, Royal Exchange-buildings, London.

THE LONDON STOCK AND SHARE COMPANY (LIMITED) TRANSACTS DAILY EVERY DESCRIPTION OF STOCK and SHARE BUSINESS.
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BEST CRUCIBLE CAST-STEEL TYRES, AXLES, CRANK AXLES, BOILER PLATES.
Also COG WHEELS, and other CASTINGS.
This company is prepared to furnish the above-mentioned articles in CAST STEEL of a very superior quality, made principally from their own well-known "BOWLING IRON."
Also BOWLING WROUGHT-IRON SOLID WELDLESS TYRES, of any size and to any section.

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MANUFACTURERS OF BLACK GREASE
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TORCH and LAMP OIL, 1s. PER GALLON (Casks free).
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EDUCATION IN COLLIERY ENGINEERING, MINERAL SURVEYING, &c.—Mr. M. GILDROY STEWART, M.E., SHETLAND HOUSE, WARMLEY, near BRISTOL, has at present VACANCIES for TWO or THREE PUPILS. Terms very moderate.

ANALYSES OF COAL, CANNEL, MINERAL OILS, and all OIL PRODUCING MINERALS are UNDERTAKEN by NORMAN TATE, F.R.S.E., &c., ANALYTICAL and CONSULTING CHEMIST, and CHEMICAL ENGINEER (Author of "Petroleum and its Products," &c.), MOLD, NORTH WALES.
Plans and estimates for oil and chemical works prepared, and their erection superintended.
Assays of metals and their ores carefully conducted.

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AND BRATTLE CLOTH FOR MINES,
MANUFACTURED BY
ELLIS LEVER,
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WEST GORTON WORKS, MANCHESTER.

JOHN HOCKING AND SON, ENGINEERS, REDRUTH, CORNWALL, CALL the ATTENTION of COLLIERY PROPRIETORS and WATERWORKS COMPANIES to the present favourable opportunities for the purchase of almost every description of CORNISH PUMPING ENGINES, at low rates. Plans, estimates, valuations, removal, &c., of every description of mining machinery undertaken.

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COPPER HOUSE FOUNDRY, HAYLE, CORNWALL, ENGINEERS, IRON and BRASS FOUNDERS.
MANUFACTURERS OF PUMPING ENGINES for WATERWORKS, MINING MACHINERY, MATERIALS, and TOOLS of every description.
Foreign mines supplied on the best terms, and at the shortest notice. Second-hand Mining Machinery and Pitwork in Stock; also a new 4 and a 2-horse power high-pressure vertical engines, with boilers, and a second-hand 14-horse whelm engine, condensing.

WILLIAMS'S PERRAN FOUNDRY COMPANY,
PERRANARWORTH, CORNWALL.
MANUFACTURERS OF STEAM PUMPING and EVERY OTHER KIND of ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.
London Agent.—Mr. EDWARD COOKE, 76, Old Broad-street, London, E.C.

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of boilers forwarded post-free on application.

CARNARVONSHIRE CONSOLIDATED LEAD MINING COMPANY (LIMITED)—CAUTION.—A BILL IN CHANCERY having been FILED for OBTAINING a CANCELLATION or RELINQUISHMENT of SHARES REGISTERED in the names of Mr. BAKER LELEAN, or his nominees, or of parties claiming through them, and for other equitable relief in respect of transactions and dealings of the said Mr. Baker Lelean in connection with the formation of this company, ALL PERSONS are hereby CAUTIONED AGAINST PURCHASING ANY SUCH SHARES.
The numbers of the shares referred to are believed to be from 2103 to 3598, both inclusive; and 4997 to 5000, both inclusive.
Further information may be obtained on application to the Secretary, at the company's office, Telegraph Chambers, 2, Telegraph-street, Moorgate-street, London. By order of a Committee of the Directors.
January 11, 1867. ROGER FENTON, Chairman.

MANCHESTER, AND WEST END OF LONDON
MR. W. HANNAH, MINING, SLATE QUARRYING, INSURANCE, and GENERAL SHAREBROKER.
ROYAL INSURANCE BUILDINGS, KING STREET MANCHESTER; and INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices. A Monthly Investment Circular on application.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.
Mining, Railway, and other Shares bought, sold, or exchanged. Shares for sale in mines and quarries that will pay 15 to 20 per cent. per annum.
Offices, 6, Finsbury-street, London, E.C.

THE RUSSIAN (VYKSOUNSKY) IRONWORKS COMPANY (LIMITED).
An ADJOURNED EXTRAORDINARY GENERAL MEETING of the above company was held at the offices this day,
W. AUSTIN, Esq., in the chair.
The SECRETARY (Mr. Clarke) read the notice convening the meeting. The report of the directors was taken as read.
It was resolved unanimously.—That the report of the directors (as below) be received and adopted, and that they be requested to take all measures necessary to carry it into effect.
Resolved unanimously.—That the agreement with the dissentient shareholders, now laid upon the table, be ratified and confirmed.
(Signed) W. AUSTIN, Chairman.
COURTENAY CLARKE, Secretary.
Extracted from the Minutes.
Pinners' Hall, Great Winchester-street, Jan. 12, 1867.

REPORT OF THE DIRECTORS TO THE SHAREHOLDERS, JAN. 1, 1867.
GENTLEMEN.—It will be in your recollection that during the past year certain shareholders in this company applied to the Court of Chancery to have their names removed from the register of members, on the ground that the powers taken by the company's Memorandum of Association embrace a wider field than was contemplated by the prospectus under which their shares were applied for. Upon these motions Vice-Chancellor Wood, whilst absolving the directors from all blame, held that, except in the case of shareholders who, after knowledge of the fact of this divergence, had acquiesced in holding their shares, the powers taken by the company beyond those set forth in the prospectus, although they might enhance the value of the company's property, afforded shareholders who might wish to avoid their liability grounds for an order to remove their names from the register.

Although counsel of great eminence are of opinion that this decision, if not wrong, was, at all events, strained in the present case, and that the House of Lords would reverse it on appeal, the directors did not feel themselves justified in spending the profits of the works in a colossal and almost endless litigation, if any other means could be devised for settling these disputes in a manner at once fair to the shareholders who refused to pay calls, and equitable to those who remained staunch to their engagements.
On the 30th October last the directors forwarded to each shareholder a circular, stating what had taken place up to that time, and offering, in order to stay further litigation, to treat as conclusive the decision of the Court in all cases of shareholders whose position might fall within that decision, and who might give notice to the company, on or before the 15th day of November last, of their desire to be removed from the register of members. The result has been that members holding 8033 shares have elected honourably to abide by their engagements, whilst members holding 6967 shares seek to avoid their liability.

The latter number there are doubtless some who would have failed in their contention, but who, nevertheless, seek to avail themselves of the decision of the Court, and escape liability under cover of the pressure put upon the company by those shareholders who have succeeded in obtaining orders for removing their names from the register.

In this state of things the directors determined to submit the affairs of the company to counsel, to settle and carry through an equitable scheme for compensating the existing and future litigation, and for carrying on the works for the benefit of the whole body of shareholders, so as to avoid the ruin which a winding-up of the company would inevitably involve.

The scheme thus settled, which will now be submitted to you for adoption, is grounded on the principle of treating the recalcitrant shareholders as retiring partners, and paying them their claims by instalments, extending over long dates, out of the profits of the company, with interest, in the meantime, proportionate to the length of time over which the repayment of principal may extend, the continuing shareholders receiving 6 per cent. interest on their capital until the retiring shareholders are paid off.

The plan is based on the following data:—
The manager of the company's works in Russia reports that he can calculate on an annual profit of £12,000 on the present scale of working, and circumstances tend rather to promise an increase than a decrease of this scale.
The debts of the company to third parties amount to £14,000
Outstanding claims, the subject of compromise £10,000
Claims by retiring shareholders for debentures, in lieu of shares 36,000 = 46,000
Capital of remaining shareholders, when paid up to £7 10s. per share 60,000

Total £120,000
The assets of the company immediately available (other than the works, stock in trade, and plant) are represented by the sum now remaining unpaid, of the last two calls, by those shareholders who continue members of the company. This sum amounts to £11,000, sufficient, when paid, to cover the liabilities of the company to third parties.

To meet the outstanding claims and the repayments to shareholders who retire from the company, the directors propose to issue debenture bonds (not exceeding £45,000 in amount) of which £5000 have been set aside for the purpose of compensating the outstanding claims. The debentures will be payable by annual instalments, in three, four, or five years, according to the option of the first holder. Those bonds which are payable in three yearly instalments will carry 4 per cent. interest per annum; those payable in four yearly instalments will carry 5 per cent. interest per annum; and those payable in five yearly instalments will carry 6 per cent. interest per annum; and in cases where the first recipient of the bonds may prefer to receive payment of the amount secured thereby in one sum at the end of three or five years (which many shareholders have agreed to), the bond will also bear 6 per cent. interest.

All the debts and outstanding claims against the company will be thus disposed of, and upon the payment of the current bonds the property and profits of the company will belong to and be divided amongst those shareholders who continue members, free (excepting the Crown debt) from every incumbrance.

The net income of the company will be applied as follows:—In the first place, to pay the half-yearly interest due on debentures; in the next place, to pay 6 per cent. interest half-yearly on the shares of all those of the continuing shareholders who have not paid the calls for the preceding half-year (members paying the calls now due on or before the 21st inst. to be entitled to such interest for the current half-year, but not otherwise), and the remainder of the company's income will be carried to the reserved fund, and will be applied to the annual payments on account of principal of the debenture bonds so long as any shall remain unpaid. The reserve fund, if found insufficient to pay the annual instalments on the bonds, must be supplemented with a call for that purpose.

Messrs. Newbon, Evans, and Co., the company's late solicitors, and Mr. F. Heritage, contributing £2500 towards the law costs which have been incurred, receive a release from the company of all claims for damages or otherwise.

The agreement which has been entered into between the company and the majority of the retiring shareholders for carrying these arrangements into effect will be laid on the table at the extraordinary general meeting of shareholders, to be held on the 11th inst. The directors have reason to believe that all the retiring shareholders will abide by that agreement.

The directors cannot conclude this report without congratulating the shareholders upon the very valuable property which they have acquired, and which, amid the almost universal collapse of industrial companies during the panic of last year, has enabled the directors to keep this company from succumbing as well to the effects of that panic as to the humiliating eagerness with which a body of the shareholders have sought to escape from liability on their shares.

The profits of the company since its commencement have been considerable; through the non-payment of calls a great portion of those profits have necessarily been applied to the renewal and extension of the works, and to the discharge of the liabilities, which, otherwise, would have been provided for out of the capital. It is calculated that the profits thus applied, and those spent in law expenses, and in resisting the attempts which have been made to break up the company, have enabled the directors to keep the company from succumbing, and were originally allotted. The directors have reason to believe that the profits of the company are on the increase, and will prove sufficient to pay off the debenture debt without further calls. To secure increased profits, however, it is necessary to secure increased efficiency at the works, so as to enable the company to accept the large and profitable contracts offered them from time to time by the Russian Government.

With this view the directors intend, in the course of the present spring, to send out an experienced person to assist the present manager, and if he should recommend probable improvements in the works, calls, not exceeding in the aggregate £2 10s. per share (which will make the shares £10 paid), will be made from time to time, as they may be required during the present year for that purpose.
By order of the Board.
(Signed) COURTENAY CLARKE, Secretary.
Pinners' Hall, Great Winchester-street, London.

EAST HOLYFORD MINING COMPANY.
TO THE EDITOR OF THE MINING JOURNAL.
SIR.—I was perfectly astonished on reading in last week's Journal a notice from the Editor, Mr. MacNally, declaring that he never was connected with the above company, and I therefore beg you to allow me to state to your readers that not only was Mr. MacNally a director, but one of the promoters of the company. In the latter capacity, he signed the Articles of Association; while, to prove the former, it is only necessary to say that almost every cheque on the National Bank, Dublin, after the company was registered, was signed by him as one of the Board. If Mr. MacNally now sees the imprudence of a clergyman's interesting himself in mining speculation he is quite right in closing his connection with the East Holyford, and to proclaim the fact; but to deliberately deny his previous connection (which is not only too obvious in Dublin, but which his letters since have been on the Continent prove), is really too bad. I regret to recommend probable improvements in the works, calls, not exceeding in the aggregate £2 10s. per share (which will make the shares £10 paid), will be made from time to time, as they may be required during the present year for that purpose.
By order of the Board.
(Signed) COURTENAY CLARKE, Secretary.
Pinners' Hall, Great Winchester-street, London.

CAPT. RICH, BODMIN, CORNWALL, being in the centre of the mining districts of Devon and Cornwall, and having had 25 years' experience in the management and inspection of mines, OFFERS HIS SERVICES to INSPECT and REPORT on MINES in either of the above counties. Orders promptly attended to.

NOTICE.—CAPT. S. M. RIDGE, of LLANIDLOES, MONTGOMERYSHIRE (late manager of the Brynastig and Cwm Fron Mines, and others, in Shropshire and Wales), is NOW OPEN to INSPECT and faithfully REPORT UPON ANY LEAD MINE in either of these localities that may be confided to his care, having had better than 30 years' experience in lead mining, as miner and agent.—Address, Capt. S. M. RIDGE, Llanidloes, Montgomeryshire.

MINING OFFICES, MANCHESTER.
THOMAS MOLYNEUX AND CO., MINE AGENTS AND SHAREBROKERS. Reliable information can be obtained as to purchase and sale of shares.
Offices of the Ellen United Copper and Zinc Mining Company (Limited), and Hazel Grove Silver-Lead Mining Company (Limited). THOMAS MOLYNEUX, secretary, 28, Princess-street, Manchester.

THE DYLAIS COAL AND IRON COMPANY (LIMITED).

Incorporated, with Limited Liability, under the Companies Act, 1862.
Capital £60,000, in 6000 shares of £10 each.
Deposit £1 per share on application, and £1 further on allotment. Subsequent calls £1 per share, at intervals of not less than three months.
It is estimated that not more than £5 per share will be called up. Nearly half the capital is already taken by the directors and vendors.

DIRECTORS.
HOWEL GWYN, Esq., M.P. for Brecon, Dyffryn House, Neath, Glamorganshire.
W. L. BANKS, Esq., Pontywal Hall, Breconshire (Chairman of the Neath and Brecon Railway, and of the Brecon and Merthyr Railway).
FREDERICK HARRISON, Esq., 15, Carlton Villas, Malda Vale, London (Director of the London and County Bank, London, and of the London and Liverpool and Globe Insurance Company, London).
JOHN J. WILLIAMS, Esq., M.D., Magistrate for the County of Brecon (Director of the Brecon and Merthyr Railway). Mount-place, Brecon.
GEORGE B. MURLEY, Esq., Langport, Somersetshire (Director of the Hiram Coal and Iron Company, Limited).
THOMAS C. HINDER, Esq., Ynyspennell, near Swansea (Chairman of the Ynyspennell Tin-plate Company, Limited; Director of the Hiram Coal and Iron Company, Limited).

(With power to add to their number.)
BANKERS—National Provincial Bank of England, Brecon.
" Provincial Banking Corporation, Swansea and Neath.
SOLICITOR—Mr. J. R. Cobb, Brecon.
AUDITORS—Thomas Frater, Esq., Manager of the National Provincial Bank of England, Brecon.
Messrs. W. H. Williams and Co., Exchange, Bristol.
" Messrs. The Members of the Bristol Stock Exchange, Bristol.
SECRETARY—Mr. Thomas Cook Davies, No. 2, Mount Street, Swansea.
REGISTERED OFFICE—2, MOUNT STREET, SWANSEA.

PROSPECTUS.
This company is formed for the purpose of leasing and working the minerals contained in the Onllwyn, and the Rhydfosddu, Cefn-yr-Erw, Castell Coch, and other estates, at the head of the Dyffryn Valley, and situated partly in Glamorganshire and partly in Breconshire.

These properties together form a total area of nearly 1000 acres, all in a ring fence. The Onllwyn property is held for a term of 53 years, and the Rhydfosddu, Cefn-yr-Erw, and Castell Coch Estates for a term of 39 years, at royalties of 8d. per imperial ton on all coal and ironstone, and proportionately low rates for fire-clay, building stone, &c. The dead rent average £1 per acre, and all the leases are determinable by three years' notice at the option of the lessees, but not by the lessors.

The Onllwyn estate consists of nearly 700 acres, and comprises in the section the Upper Four-foot coal, the Eighteen-foot, the Nine-foot, the Lower Four-foot, and other veins, making a total workable thickness of between 30 and 40 feet.

Under the whole of this property are also contained the series of argillaceous ironstone belonging to the north out-crop of the South Wales mineral basin. All the seams of coal and ironstone are fully proved by existing workings, and are shown in the map of the Ordnance Survey. The coal is a pure anthracite, and is admirably adapted for smelting iron, for malting, lime burning, hop drying, and heating stoves. At present it is not largely used in this country for steam purposes, chiefly owing to the defective communications with the districts in which it is found. Recent railway extensions will, however, enable this coal to compete fairly in the markets of the world, and its extraordinary and valuable properties will now, unquestionably, become as well known and appreciated for ocean steam navigation and for locomotive and stationary engines in this country as they have long been in the United States of America. It is absolutely smokeless, makes little or no ash or clinker, evolves the most intense heat in combustion, and is unapproachable by any other description of coal for strength and durability.

From its great density and hardness, it is admirably adapted for long steam voyages. It stows in less compass than any other coal in the world, is unaffected by exposure to weather or climate, and is entirely free from all danger of spontaneous combustion or of explosion.

For iron-making purposes it is invaluable: the pig-iron smelted by this coal has long been locally celebrated, and now that railway routes are coming into operation in the district, it is greatly in demand at high prices in Staffordshire and other parts where first-class pig-iron is needed.

On this property are two well-built blast-furnaces, with six hot-air ovens, powerful blast-engine, five excellent boilers, with chimney stack, &c., complete, foundry, fitting, blacksmiths' and carpenters' shops, offices, storehouses, manager's house, stabling, and about fifty workmen's houses, all let and bringing in rental of upwards of £300 per annum.

There are also five brick works, clay mill, and five other steam-engines, with boilers, pumps, &c., working on various parts of the property, together with trams, weighing machines, and many miles of above and underground rail and tram-roads; also tools, plant, &c., all in use and in working order.

The Rhydfosddu, &c., estates are of great value as ironstone properties, the ore being rich in percentage of iron, and excellent in quality, while the ground is highly productive.

This property is, moreover, so situated that the whole of the ironstone veins crop out on the hills on the east side of the vale of Tawe in such a position that for many years they will be got by open working. When it shall become necessary to drive underground, the Rhydfosddu being 500 or 600 ft. below the top of these hills will afford free drainage for an inexhaustible tract of minerals.

The main line of the Neath and Brecon Railway intersects the Onllwyn tract; and the Swansea Vale and Neath and Brecon Junction Railway runs through the Rhydfosddu and other properties. These railways have been promoted by the landowners in the district, and the development of these important mineral estates has been carefully kept in view in laying out the lines; the capital, consequently, which must otherwise have been expended in opening these tracts will be greatly lessened.

The Neath and Brecon Railway was opened through for goods and mineral traffic on Sept. 12, 1866. The Swansea Vale and Neath and Brecon Junction is being pushed on to the utmost, and it is anticipated that the whole system will be completed throughout during the present year.

Before the completion of these railways these estates had no means of communication other than a defective and expensive tramroad five miles in length, and supplies of limestone for fluxing purposes, &c., were only obtainable by similar means. By the completion of the Neath and Brecon line the cost of this important material will be reduced between 30 and 40 per cent.

The present owners of the property have agreed to accept £21,500 as the purchase-money, including the whole of the buildings, erections, houses, engines, machinery, and fixed and movable plant; payable one-third in cash, one-third in shares of the company, with one-half (that is, £5 each paid-up) and one-third in debentures of the company, having three years to run, and bearing interest at 5 per cent. per annum. It is anticipated there will be no difficulty in renewing these, if desirable.

It is proposed to call up on the shares issued to the public, at such intervals as may be requisite, £5 per share, thus making them paid-up to an equal amount with the shares taken by the vendors in part payment of purchase-money as above.

The present furnaces are equal to a weekly make of 140 tons of pig-iron, and it is proposed to lay out £6000 in extending the colliery openings sufficiently to supply 200 tons of coal per day for sale, the extraction having hitherto been confined to the purposes of the ironworks.

The cost and production will then stand thus:—

Purchase-money in cash and shares, exclusive of debentures, for which see below	£21,000 0 0
Amount required for extension of collieries	6,000 0 0
Working capital	2,000 0 0
Amount of share capital to be called up at £5 per share	£30,000 0 0
Amount of debentures, interest on which at 5 per cent. is deducted from profits, as below, £10,500.	
PRODUCTION.	
140 tons pig-iron weekly, say 7000 per annum, at 7s. 6d. per ton profit	£2625 0 0
200 tons coal per day, say 200 days per annum, at 2s. per ton profit	6000 0 0
Total	£8625 0 0
Less interest at 5 per cent. on £10,500 debentures, as above	525 0 0

Thus showing a profit of upwards of 25 per cent. per annum, without taking into account the income from rents and other sources.

These calculations have been carefully considered and verified by practical ironmasters and mining engineers personally acquainted with the locality, and the directors are satisfied that the above estimate of profits is considerably understated.

No promotion money will be paid, nor any expenses incurred, except those which are strictly legal and necessary.

If no allotment be made, the deposit money will be returned in full.

Prospectuses and forms of application may be obtained of any of the directors, or of the bankers, solicitors, auditors, or brokers of the company; and abstracts of the leases, with plans and further particulars of the property, and copies of the Memorandum and Articles of Association may be seen on application to the Secretary, at the company's offices, No. 2, Mount Street, Swansea; or, at the offices of Mr. J. R. Cobb, Solicitor, Brecon; or of G. B. MURLEY, Esq., Langport, Somersetshire.—Nov., 1866.

TO MINE, SLATE QUARRY, AND RAILWAY COMPANIES.—CAPT. C. WILLIAMS IS NOW OPEN TO UNDERTAKE ALL KINDS OF CONTRACTS, such as DRIVING LEVELS, SINKING SHAFTS, CONSTRUCTING WATER COURSES, CANALS, TRAMWAYS, &c., and ERECTING ALL SORTS OF MACHINERY FOR MINING AND OTHER PURPOSES, having on hand at all times a first-class staff of miners and machinists, who will proceed to any part of the world upon the shortest notice.
N.B.—In all cases 30 per cent. will be left in hand until the work is completed.
Tyn-y-Wern, Taliesin, via Shrewsbury.

NOTICE OF REMOVAL.

MESSRS. TREDINNICK AND CO.,
DEALERS IN STOCKS AND SHARES.

MR. RICHARD TREDINNICK,
MINING ENGINEER AND CONTRACTOR.

MR. THOMAS TREDINNICK,
SCRIVENER.

OFFICES.—ST. MICHAEL'S HOUSE, CORNHILL, LONDON.
The business hitherto conducted at 78, Lombard Street is transferred to the above address.
Stocks, Shares in Banks, Railways, Canals, and Insurance Companies dealt in, and Money Advanced upon all sound Securities. Principals alone treated with.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the WHEAL LOVELL MINING COMPANY.—TO BE SOLD, BY PUBLIC AUCTION, at and upon the WHEAL LOVELL MINE, situate in the parish of Wendron, in the county of Cornwall, under the direction of the Registrar of the said Court, on Monday, the 28th day of January instant, at Twelve o'clock at noon, subject to such conditions as shall be then and there produced, together or in lots, all the INTEREST of the said COMPANY of and in the SETT or GRANT by virtue of which the mining operations of the said company have been carried on, and the MINING MACHINERY, MATERIALS, and EFFECTS now at the said mine, including, amongst other things—

ONE STEAM ENGINE, 50 in., 9 ft. stroke in cylinder, with first piece of rod, with woodwork of engine-house.
TWO BOILERS, 20 tons, with fittings. ONE ditto, 9 tons, with fittings.
STEAM WINDING ENGINE, 16 in., 4 ft. stroke, with fly-wheel and whim cage. STEAM STAMPS ENGINE, 24 in., 8 ft. stroke, with two fly-wheels and cranks attached. ONE BOILER, 10 tons, with fittings.
2 stamper axles, with cranks, blocks, and brasses, 24 heads; wood frames, with bolts; 15 guides and braces, part of old boiler, 11 ft. 6 in. working, 3 10 ft. 6 in., 2 10 ft. 7 in., 1 9 ft. 11 in., 20 9 ft. 7 in., 2 6 ft. 7 in., 4 9 ft. 8 in., and 1 6 ft. 8 in. pumps; 1 10 in. H and dooprice, with doors; 1 8 in. ditto, 1 10 ft. 9 in. plunger pole, 1 9 ft. 8 in. ditto, with stuffing box and gland; 1 12 ft. 7 in. plunger pole, 1 8 ft. 6 in. windborne, smiths' bellows, beams and scales, 44 new stamper cams, 9 machine frames, tram carriages, weights, long winze tackle, ladders, elevators, &c.—To view, apply to Mr. JAMES JAMES, at the mine.

JOSEPH ROBERTS, Solicitor, Truro.

Dated Registrar's Office, Truro, 2d January, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the WEST WHEAL VOR MINING COMPANY.—The Registrar of the Court has appointed Monday, the 28th day of January inst., at Eleven o'clock in the forenoon, at the Registrar's Office, at Truro, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE NAMED COMPANY, now made out and deposited at the said office.

WILLIAM MICHELL, Registrar of the said Court.

Dated the 17th day of January, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the WEST WHEAL VOR MINING COMPANY.—ALL CREDITORS or CLAIMANTS of the ABOVE NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's Office, Truro, on Wednesday, the 30th day of January inst., at Eleven o'clock in the forenoon, or in default thereof they will be excluded from the benefit of any distribution made before such proof.

And for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.

WILLIAM MICHELL,

Registrar of the above-named Court, Truro, Cornwall.

Dated Truro, January 17th, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the TRESKERBY MINING COMPANY.—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on Monday, the 4th day of February next, at Eleven o'clock in the forenoon, at TRESKERBY MINE, in the parish of Gwennap, within the said Stannaries, either together or in lots, the undermentioned MINING MACHINERY, MATERIALS, and EFFECTS, viz.:—

ONE 36 in. cylinder PUMPING ENGINE, with 11 ton BOILER and fittings. Shears, with 2 pulleys complete; balance and other bobs, capstan, rope, shaft tackle, 2 horse whims, blocks, pumps, windbore, H and dooprice, working barrels, 10 in. plunger pole, stuffing box and gland, plunger case, wood rods, rod plates and pins, staples and glands, and flange pins, ladders, bucket and bucket rods, smiths' and miners' tools, new and old timber and iron, together with the account-house and office furniture, and a variety of other articles and effects in general use in mines.

The machinery, materials, and effects may be inspected at any time prior to the sale, on application to Mr. John James, in charge thereof.

HODGE, HOCKIN, AND MARRICK, Solicitors, Truro.

Dated Registrar's Office, Truro, January 8th, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the ST. JUST UNITED MINING COMPANY (LIMITED).—ALL CREDITORS or CLAIMANTS of the ABOVE NAMED COMPANY who have not received notice from the Registrar of the said Court that their claims have been already admitted, are hereby REQUIRED to COME IN and PROVE THEIR SEVERAL DEBTS or CLAIMS at the Registrar's Office, in Truro, on Wednesday, the 23rd day of January inst., at Eleven o'clock in the forenoon, or in default thereof they will be excluded from the benefit of any distribution made before such proof.

And for the purpose of such proof they are either to attend in person, or by their solicitors or competent agents, or (unless such attendance be required by the Registrar's summons) they are to send affidavits of their several debts or claims to the Registrar of the Court at Truro, such affidavits being sworn either before some Commissioner of the said Court, or before any Court, Judge, Justice, or any Commissioner of one of the Superior Courts lawfully authorised to take and receive affidavits and affirmations.

WILLIAM MICHELL,

Registrar of the above-named Court, Truro, Cornwall.

Dated Truro, 17th January, 1867.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

MAY AND ANOTHER v. MIDDLETON.

IN RE TREWHEAL ROSE MINE.

TO BE SOLD, pursuant to an Order made in the above Cause, and dated the 26th day of October last, BY PUBLIC AUCTION, at TREWHEAL ROSE MINE, in the parishes of Cranstock and Newlyn, within the said Stannaries, on Monday, the 21st day of January inst., at Eleven o'clock in the forenoon, the undermentioned MINING MACHINERY, MATERIALS, and other effects, namely—ONE 48 inch PUMPING ENGINE, 9 feet stroke; ONE BOILER, 9 tons; capstan and shears; one horse wind and rope, 70 fms.; 100 fms. of chain, poppet heads and shanks, 2 skips, 18 fms. double skip rope, 20 fms. iron stamper ladders and wood ladders, one force pump, one tackle, two winze kibbles, bolts and bars, smiths' bellows, anvil, and tools, miners' tools, shovels and hiltis, barrows, grinding stone, carpenter's bench, material house, new and old iron and timber, and other articles and effects in general use in mines.

CARLYON AND PAUL, Plaintiffs' Solicitors, Truro.

Dated Registrar's Office, Truro, Jan. 10, 1867.

In Chancery.

IN THE MATTER OF THE RHOS HALL IRON COMPANY (LIMITED),
TIPTON, STAFFORDSHIRE.

THE IMPORTANT FREEHOLD PROPERTY, known as the TIPTON IRONWORKS, together with the MINES and the VALUABLE FIXED PLANT and MACHINERY, in excellent working condition.

MESSRS. PRICE AND CLARK WILL SELL, at the Hen and Chickens Hotel, Birmingham, on the 24th day of January, 1867, at Twelve for One o'clock, in One Lot, pursuant to the order of the Court of Chancery made in the said matter, with the approbation of the Master of the Rolls.

THE VALUABLE FREEHOLD PROPERTY, known as the TIPTON IRONWORKS, in the parish of TIPTON, in the county of STAFFORD, containing, by estimation, 5A. 2R. 5P., or thereabouts, and the MINES and MINERALS, containing 4A. 2R. 26P., or thereabouts, under part of the surface (except the surface clay under part of such land). Together with the FIXED PLANT and MACHINERY, in excellent working condition.

The works have a frontage of about 600 ft. to the Birmingham Canal, also a boat dock of 150 ft. in length, and in close proximity to two railway stations, and comprise HOOP and SLITTING MILLS, cutters' shop, smithy, foundry, spacious open buildings with slated roofs, stabling, offices, managers' residences, &c. There are TWO BLAST FURNACES, measuring respectively 51 feet and 49 feet in height; three hot-air stoves, TWENTY-THREE PUDDLERS' FURNACES, SIX MILL FURNACES, several lofty chimney-shafts, FIVE STEAM-ENGINES, TWELVE STEAM-BOILERS, a 16-inch train of two pairs of forge bar and billet rolls; a boiler-plate train, with two pairs of rolls; one pair of No. 2, forge, two trains of 10 and 8-inch hoop rolls, a pair of 12 and 13-inch hoop hard rolls, a pair of 16-inch hard rolls; a 16-inch bar-train for slitting-mill, with all the necessary gearing; powerful turning lathes, fittings of gasworks, FOUR HUNDRED DOUBLE YARDS OF IRON RAILS, a large area of iron-works plates, and numerous appliances adapted for the efficient conduct of the works.

The premises may be viewed, and particulars had gratis at the place of sale of Messrs. RUTTER and NEVE, solicitors, Wolverhampton; and in London of GEORGE SCOTT, Esq., the official liquidator, 2, Bond-court, Walbrook; of Messrs. HOLLINGS, SHARP, and ULLITHORPE, solicitors, Field-court, Gray's Inn; and at the offices of Messrs. PRICE and CLARK, 48, Chancery-lane.

ROBERT MARSHALL, Chief Clerk.
HOLLINGS, SHARP, AND ULLITHORPE, Gray's Inn,
Agents for Rutter and Neve, Wolverhampton.
(Solicitors for Official Liquidator).

Dated this 19th day of December, 1866.

TO BE SOLD, cheap, a PORTABLE ENGINE of 14 horse power, double cylinder, first-class construction, workmanship, and material. Winding gear to order. SECOND-HAND PORTABLES FOR SALE.
—Apply to Messrs. BARROWS and CARMICHAEL, engineers, Banbury, Oxon.

GLAMORGANSHIRE.—VALUABLE MINES AND MINERALS.

MR. THOMAS THOMAS WILL SELL, BY AUCTION, at Castle Hotel, Neath, on Friday, February 1, 1867, at Four o'clock in the afternoon, subject to conditions of sale to be then produced, all those leasehold MINES and MINERALS, under a part of the GLANBRANNE ESTATE situate in the parish of LLANSAMLET, containing about 212 acres, held on a lease granted by the Neath Abbey Coal Company, at a rent of £400 per acre and royalties.

Further particulars may be obtained on application to Messrs. NEWBY, LYON, and NEWMAN, Solicitors, 7, King's Bench Walk, Temple, London, Yewell, Somerset; JAMES KEMPTHORNE, Esq., Solicitor, Neath; or to the auctioneer, at his offices at Neath and Swansea.

VALUABLE COAL FIELD IN THE WEST OF FIFE TO LET.

TO BE EXPOSED TO LET, BY PUBLIC ROUP, without Town-house of Dunfermline, on Tuesday, the 12th day of February at Twelve o'clock noon, on a lease for 21 years, from and after Whitsunday or such longer period as may be agreed upon, the WHOLE SEAMS OF COAL SHALE, IRONSTONE, and FIRECLAY, in and under a portion of the land belonging to the Burgh of Dunfermline, extending to 150 imperial acres, and lying about two miles north-east of the burgh. Most of the coal seams, which have rendered the collieries of Wellwood, T. Hill, and Halbeath so famous, are known to be in these lands. There is a facility for conveying the minerals now to be let, by railway or otherwise, in all directions.

Further information may be had, and the conditions of let seen, on application to DAVID LANDALE, Esq., Mining Engineer, Edinburgh; or to JOHN DALE, Esq., Town Clerk of Dunfermline.—Dunfermline, Jan. 15, 1867.

TENDER.

THE DUN MOUNTAIN COPPER MINES.—TO BE SOUGHT BY TENDER, the DUN MOUNTAIN COPPER MINES, with the L. and BUILDINGS belonging thereto, and the LIVE and DEAD STOCK therewith, situate at NELSON, in NEW ZEALAND.

The property consists of the following particulars:—
A FREEHOLD MINING ESTATE, called the DUN MOUNTAIN, at Nelson, in New Zealand, containing by admeasurement 1687 acres, little or less, with all the timber and timber-like trees growing thereon.

Another FREEHOLD ESTATE, contiguous to the said Dun Mountain, containing upwards of 2800 acres.

Also, TWO PIECES OF FREEHOLD LAND in Brook-street and Alton-street, containing 1¼ acres or thereabouts, with houses, stables, offices, and buildings standing thereon.

Also, a FREEHOLD TRACT, 1 chain wide, through the estates of J. New T. R. Hackett, and others.

The RAILWAY RAILS on the said Dun Mountain to the town of Nelson, fixed, with the sleepers thereto belonging, as the same now stand. There are about 14 miles of railway.

Together with the HORSES, WAGONS, and ROLLING STOCK, &c., a tenant to such mining property.

For further particulars, apply to Messrs. OLIVERSON, PEACHEY, DENBY, PEACHEY, solicitors, 8, Frederick's-place, Old Jewry, London, to whom the may be sent.

FOR SALE, BY TENDER, BILLIA CONSOLS AND RE-

CONSOLIDATED MINES SETTS and MATERIALS, situated in parishes of Toward and Ury Leland, in the county of Cornwall, consisting ONE 36 in. PUMPING ENGINE, with 10 ton BOILER, nearly new. ONE 22 in. WINDING ENGINE, with 8 ton BOILER, nearly new. ONE 27 in. STAMPING ENGINE, with 8 ton BOILER, lifting 36 head. About 300 fms. pitwork, 11 to 16 in., and all the necessary materials for running the mine.

The lodes are parallel to and adjoining Wheal Reeth, and afford a ready opportunity to capitalists.

Sealed tenders, marked "Tenders for Reeth Consols Mine," should be addressed to Mr. JAMES B. COULSON, Penzance, on or before Saturday, the February next, soon after which the purchaser will have notice thereof. For particulars, apply to Capt. R. BLIGHT, at the mine.

Dated Penzance, January 9, 1867.

FOR SALE, and may be seen at the Ashburton Mines, 56 in. PUMPING ENGINE, with TWO 11 ton CORNISH made BOILERS. ONE 40 in. PUMPING ENGINE, only made a short time, and as good as with an 11 ton BOILER. A 24 in. WHIM ENGINE, with stamps attached. 11 ton BOILER. Several WATER-WHEELS of various sizes, one with excellent drawing machine attached. Pumps and materials of all sizes.—Application may be made to Mr. W. MATHEWS, engineer, Tavistock, or to any of the agents named below, in charge of the mine.

LEAD MINE.—FOR SALE, BY PRIVATE CONTRACT.
LEASE, PLANT, and MACHINERY of the TEES SIDE MINE, ALSTON, CUMBERLAND. The sett is very extensive, and is traversed by several powerful veins; from one of them 1000 tons of lead ore has been taken from a shaft 20 fathoms deep, and on a length of ground about 50 fathoms extent, at 1-7th dues. The dues are now 1-20th. Lodgings for miners, shops, stabling, &c., are all in order for immediate operations.

The agent on the mine will show the property, and for other particulars apply to Mr. J. H. ROBINSON, 21, Cumberland-row, Newcastle-on-Tyne; to Mr. HOYLE, SHIPLEY, and HOYLE, Solicitors, Newcastle-on-Tyne; or Messrs. HOYLE and HOYLE, Solicitors, 123, Cannon-street, London.

GELYNOG LLANTWIT COLLIERY.—FOR SALE, BY PRIVATE CONTRACT.

The Liquidators of the GELYNOG LLANTWIT COLLIERY COMPANY (LIMITED) wish to DISPOSE of the valuable PLANT and MACHINERY, together with the unexpired term of the LEASE of this Colliery. The plant and machinery is in good order; it has been laid down during the past two years, comprises everything necessary for working the colliery. Further particulars, and orders to view, may be obtained on application to ALFRED BAKER, Esq., 1, Westminister Chambers, Victoria-street, London, or the Official Liquidators.

DEAN FOREST, GLOUCESTERSHIRE.

VALUABLE COAL FIELD.—TO BE SOLD, OR

all the FREEHOLD INTEREST in a rich COAL FIELD of 3500 acres, lying in the deep and adjoining two coal fields, which have been worked for many years, but are now nearly exhausted. Fire-damp is not in the Dean Forest Collieries, and the principal vein lies generally under the top. The property is linked by direct communication with the Port of Chester.—For further particulars, apply to Messrs. DEBENHAM, TEWSON, & FARMER, Land Agents, 80, Cheapside, London.

SUITABLE FOR A HARDWARE MANUFACTORY.

TO BE LET, for a term of 99 years, a most VALUABLE and ELIGIBLE SITE of from FIVE to FIFTEEN ACRES, with a fine falling stream of water passing through. Large collieries are in the neighbourhood, tin and wire works within a mile, and extensive ironworks carried on in the same valley. There is a first-class station within 200 yards at which 20 passenger trains stop daily; the property is on a level with a siding may be constructed with great facility.

The Great Western and the London and North-Western trains work of the district and the traffic of the station referred to, and the sharp curves of these great railway companies has tended to reduce the rate of the lowest possible charges.

For further particulars, apply to Messrs. DEBENHAM, TEWSON, & FARMER, Auction, Land, and Estate Agency Offices, 80, Cheapside, London, E.C.

TO CAPITALISTS, PUBLIC COMPANIES, AND OTHERS.
Particulars of a VALUABLE AND EXTENSIVE SLATE AND QUARRY PROPERTY FOR IMMEDIATE DISPOSAL BY PRIVATE CONTRACT, situated in NORTH WALES, within about four miles of shipping port, place a railway, running for nearly two miles parallel to and with hundred yards of the estate, will enable the produce to be conveyed at a nominal cost. There are upon the property four or five very EXTENSIVE SLATE VEINS and a VALUABLE COPPER MINE.

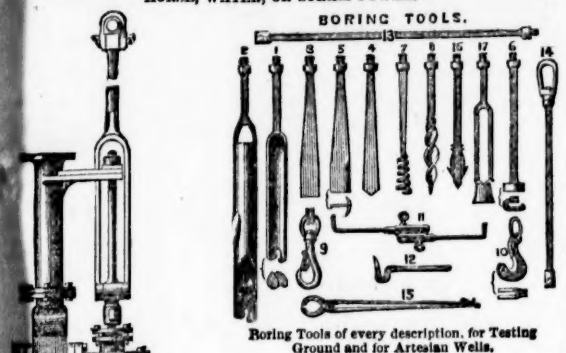
Three quarries have been opened, and the works in either case brought to completion, several cargoes of excellent slates having been sold, a large quantity of very rich copper ore. There are about 800 yards of 100 yards of shafts, about one mile of iron rails laid down, foreman's magazine, &c.

The lease is for a term of NINETEEN YEARS, WITHOUT ANY RENT, ROYALTY WHATEVER. These unusually favourable terms very much increase the value of the property. There are reports and opinions of seven of the most eminent authorities as well as other opinions as to the capabilities of the property. In addition

BICKFORD'S PATENT SAFETY-FUSE OBTAINED the PRIZE MEDALS at the ROYAL EXHIBITION of 1851, at the INTERNATIONAL EXHIBITION of 1855, in London, and at the IMPERIAL EXHIBITION held in Paris, in 1856.

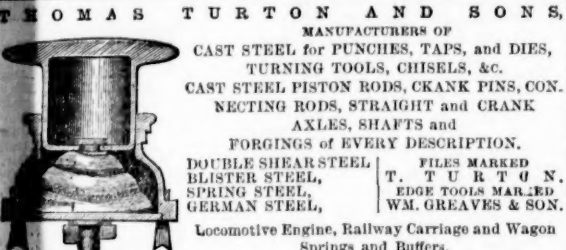
BICKFORD, SMITH, AND CO., of TUCKINGMILL, CORNWALL, MANUFACTURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—EVERY COIL of FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.

OWENS AND CO. (LATE CLINTON AND OWENS), WHITEFRIARS STREET, FLEET STREET, LONDON, E.C., HYDRAULIC AND GENERAL ENGINEERS, MANUFACTURERS OF PUMPS OF EVERY DESCRIPTION FOR HAND, HORSE, WATER, OR STEAM POWER.



BORING TOOLS.
Boring Tools of every description, for Testing Ground and for Artesian Wells.
Improved Double-action Pumps.
Full information, Drawings, Price Lists, &c., relating to the above, and to hydraulic machinery of all descriptions—Grabs, Pileys, Blocks, and Hoisting Tackle of superior construction—may be had on application.

THOMAS TURTON AND SONS, MANUFACTURERS OF CAST STEEL FOR PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c. CAST STEEL PISTON RODS, CRANK PINS, CON-NECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and FORGINGS OF EVERY DESCRIPTION. DOUBLE SHEAR STEEL, FILES MARKED T. TURTON. BLISTER STEEL, EDGE TOOLS MARKED WM. GREAVES & SON. SPRING STEEL, GERMANY STEEL, Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.



SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
SALE LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C., Where the largest stock of steel, files, tools, &c., may be selected from.

Gun-Cotton—By Royal Letters Patent.
PRENTICE'S BLASTING GUN-COTTON PRODUCES NO SMOKE, and having been further REDUCED IN PRICE is now by far the CHEAPEST as well as the SAFEST material which can be used in any description of mining or quarrying work. Sample cases, together with every information, may be obtained from—**THOMAS PRENTICE AND CO.,** 173, FENCHURCH STREET, LONDON, E.C. AGENT—Mr. Thorne.

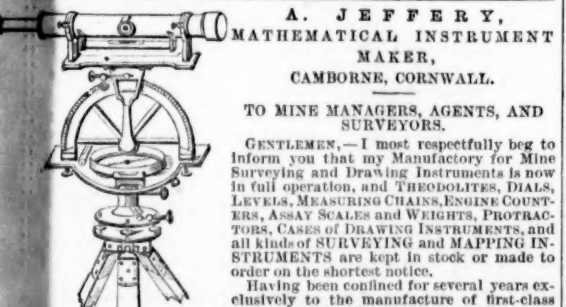
GUN-COTTON has been constantly used with great success in the tunnel of the Aberdeen Water-Works, lately opened by Her Most Gracious Majesty the Queen.

COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY, having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY TO MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES. The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE. All communications to be made to Messrs. FIRTH, DONNISTHORPE, and BOWER, the rate No. 6, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

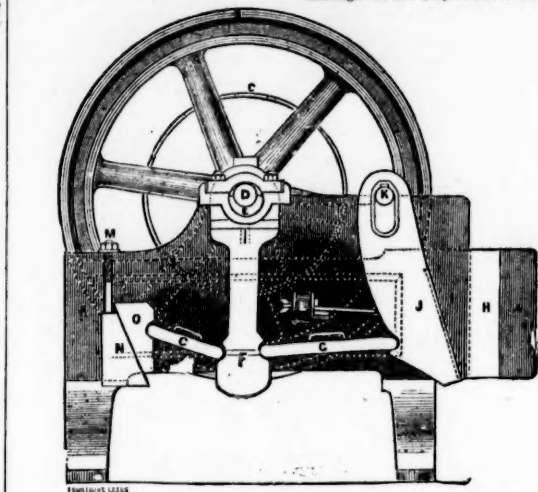
TO CAPTAINS OF MINES, ENGINEERS, AND SURVEYORS AND ALL WHO DRAW PLANS. **STENCIL PLATES** of a new description, for LETTERING PLANS. Messrs. BERKELEY beg to state that they have invented a new description of STENCIL PLATES, for expediting the Lettering on Plans. The above will enable any person to produce the most accurate impressions, resembling the finest hand-work. They prevent the ink from spreading or blotting under the plate, and are far superior to anything of the kind that has ever been used, and are supplied at less than one-half the usual cost. One hundred and fifty testimonials, with specimens, &c., forwarded to all parts of the world on application to—**BERKELEY AND CO.,** 28, CHURCH STREET, KENTISH TOWN, LONDON.

The new description of Stencil Plates for Lettering Plans can be had in all languages. The new description of Stencil Plates for Lettering Plans will enable any person to accomplish the work of a day in one minute.



A. JEFFERY, MATHEMATICAL INSTRUMENT MAKER, CAMBORNE, CORNWALL.
TO MINE MANAGERS, AGENTS, AND SURVEYORS.
GENTLEMEN,—I most respectfully beg to inform you that my Manufacture for Mine Surveying and Drawing Instruments is now in full operation, and THEODOLITES, DIALS, LEVELS, MEASURING CHAINS, ENGINE COUNTERS, ASSAY SCALES and WEIGHTS, PROTRACTORS, CASES OF DRAWING INSTRUMENTS, and all kinds of SURVEYING and MAPPING INSTRUMENTS are kept in stock or made to order on the shortest notice. Having been confined for several years exclusively to the manufacture of first-class Mine Surveying Instruments—which profession I trust I have to some degree mastered with practically and theoretically—I confidently venture to solicit an inspection of my manufactures, which cannot be surpassed for accuracy and general good quality by any firm either in the metropolis or the provinces. All kinds of repairs and alterations made to instruments. All work executed under my own direct supervision, and none but experienced assistants employed. All work guaranteed as first-class for quality and accuracy, and, if found otherwise, forfeited. Soliciting your kind favours. I remain, Gentlemen, yours obediently, **A. JEFFERY.** Camborne, July 29, 1866.

IMMENSE SAVING OF LABOUR.
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, MCADAM ROAD MAKERS, &c., &c.
BLAKE'S PATENT STONE BREAKER, OR ORE CRUSHING MACHINE,
FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.
It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morecom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour. For the Parys Mining Company, **JAMES WILLIAMS.**
H. R. Marsden, Esq.
Eaton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaw, about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery. For the Parys Mining Company, **JAMES WILLIAMS.**
H. R. Marsden, Esq.
Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. **WILLIAM HUNT.**
Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz. **WM. DANIEL.**
Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADISON, Stone and Lime Merchants, Darlington.
Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. **JOHN LANCASTER.**
Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. **WM. G. ROBERTS.**
General Fremont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. **SILAS WILLIAMS.**

For circulars and testimonials, apply to—
H. R. MARSDEN, SOHO FOUNDRY, MEADOW LANE, LEEDS, ONLY MAKER IN THE UNITED KINGDOM.

GIFFARD'S PATENT INJECTOR COMPLETELY SUPERSEDED BY THE NEW PATENT DONKEY STEAM PUMP

[SPECIFICATION.]
This Pump is constructed on an entirely novel and simple principle, there being only a crank-shaft and fly-wheel of small size, the slide-valve being worked inside the steam chest by means of a steel crank and friction roller, thus dispensing with eccentric rod, and straps. All the working parts are made of steel, hardened and polished. The cylinder and pump are in one casting, and bored throughout the body of the pump as well as the stuffing-box. The pump-ram is of the best gun-metal, being cast in one piece with the piston and piston-rod, and fitted accurately to the bored body of the pump, thus ensuring a nearly perfect vacuum in pumping. The stuffing-box glands are also of gun-metal polished. The valve and boxes are of the best gun-metal, the valves being of the spherical construction, the covers fitted with brass cages, and the joints faced metal to metal. The slide-valve is of hard bell-metal. The steam-chest, with cylinder end, is in one piece, and may be removed without disturbing either steam or exhaust pipes. The whole engine may be taken to pieces and put together under steam in fifteen minutes, without disturbing any pipes whatever.

Size.	Ram.	Stroke.	Approx. h.p.	Approx. gal.	Price of Giffard's Injector.
No. 4	1 1/2	3	15	230	£10 10
5	1 3/4	3	22	350	12 12
6	2	3	30	500	14 14
7	2 1/4	4	40	700	17 0
8	2 1/2	4	55	900	19 10
9	2 3/4	4 1/2	75	1150	22 10
10	3	5	90	1420	25 10
11	3 1/4	6 1/2	110	1720	28 10
12	3 1/2	8	120	2000	31 10

N.B.—Sizes and capacities similar to Giffard's Injector. All guaranteed to work efficiently.
Terms: Nett Cash on Delivery in London.
Giffard's injector will not force water over 120° Fahr., while these pumps possess the great advantage of being able to pump boiling water. Giffard's injector will not draw water over 6 ft. deep, while these pumps draw water 15 ft., and by using one size larger than required for forcing the quantity will draw 30 ft. deep. These pumps begin to work at 15 lbs. per square inch; to work at a lower pressure the next larger size must be used. Sizes up to No. 10 kept in stock. Larger sizes, and special pumps for throwing water into tanks, or as fire-engines, can be made in a few days on application to the undersigned.
BROWN, WILSON, AND CO., 80, CANNON STREET, E.C.; AND VAUXHALL IRONWORKS, S.

CREASE'S NEW AND IMPROVED PATENT BORING MACHINE.—In consequence of the various and IMPORTANT IMPROVEMENTS that an experience of several years has enabled the inventor to introduce into these machines, he can with the most perfect confidence recommend them for their increased DURABILITY, SIMPLICITY, ECONOMY, and SPEED to be attained by their adoption in DRIVING LEVELS or DRIFTS. The inventor has made arrangements to supply them in any quantity, with warranty. Orders executed according to their date of priority. Address, EDWARD S. CREASE, Tavistock, Devon.

BASTIER'S CHAIN PUMP.—This patent pump is the MOST EFFICIENT in existence for LIFTING ANY QUANTITY of WATER from ANY DEPTH. One lifting from a depth of 170 ft. may be seen at work daily, on application to the SOLE LICENSEES, MESSRS. J. JACKSON AND CO., ENGINEERS, 17, GRACECHURCH STREET, LONDON, E.C. Who SUPPLY PUMPS and LICENCES. Communications to Mr. Bastier, the inventor, to be sent to the same address. AGENT FOR THE COUNTIES OF NORTHUMBERLAND AND DURHAM, YORKSHIRE, DERBYSHIRE, AND NORTH STAFFORDSHIRE, Mr. THOMAS GREENER, MINING OFFICE, NORTHGATE, DARLINGTON. AGENTS FOR SCOTLAND, MESSRS. P. and W. MACLELLAN, 127 and 129, IRONGATE, GLASGOW.

ACCIDENTS WILL HAPPEN! Everyone should, therefore, provide against them! £1000 in case of death, or £50 per week while laid up by injury, caused by ACCIDENT OF ANY KIND (riding, driving, hunting, shooting, fishing, &c.), may be secured by an Annual Payment of from £3 to £5 5s. to the RAILWAY PASSENGERS' ASSURANCE COMPANY, The Oldest Established and Largest Company in the World insuring against ACCIDENTS OF EVERY DESCRIPTION. For particulars apply to the Clerks at any of the Railway Stations, to the Local Agents, or at the OFFICES,—64, CORNHILL, and 10, REGENT STREET, LONDON. **WILLIAM J. VIAN, Sec.**

RAILWAYS AND MINES.—Capitalists who seek safe and profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the bona fide merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the Money Market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range of profit than any other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £10 to £15 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to Railways and Mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment. Messrs. TREDINNICK AND CO., ST. MICHAEL'S HOUSE, CORNHILL, LONDON.

FINANCE, RAILWAYS, AND MINING IN THE UNITED STATES.—Persons in the United Kingdom and the colonies interested in the above should order THE STOCKHOLDER: MONITOR OF FINANCE AND INDUSTRY, MINING AND RAILWAY RECORD. Published every Tuesday morning, at No. 72, William-street, New York, U.S.A., 16 pages 4to, at \$6 per annum for European subscriptions, postage prepaid; six months, \$3. Accurate quotations of all important Bonds and Stock Securities in the United States; Government, State, City, Bank, Insurance, Petroleum, Mining, and other miscellaneous Joint-Stock Organisations, with the Financial Statements of the same; Notices of Payment of Interest and Dividends; with numerous papers on United States Finances, and the Railway and mining interests of that country. Inventors and parties dealing in railway materials and supplies, or mining machinery, will find this journal an excellent medium for advertising in the United States their manufactures and inventions. Subscriptions and advertisements received at the office of the LONDON MINING JOURNAL, 26, Fleet-street, E.C., and by Mr. F. ALGAR, agent, 11, Clement's-lane, Lombard-street, London, E.C.

LETTS'S CHEAP DIARIES FOR 1867 are PUBLISHED in over FIFTY DIFFERENT FORMS, and are especially suited to the wants of Mechanics, Shopkeepers, and Servants. Catalogues gratis of all booksellers.

THE WREXHAM ADVERTISER, DENBIGHSHIRE, FLINTSHIRE, SHROPSHIRE, CHESHIRE, AND NORTH WALES REGISTER (Established 1848).—The town of Wrexham forms the centre of a large and important agricultural and mining district, which, from the increasing attention of capitalists, aided by the advantages afforded by new railways, is rapidly increasing in population, and bids fair to rival Wolverhampton in commercial importance. The Advertiser, partaking of the general prosperity, has largely increased its weekly circulation, 1000 more copies being now issued of each impression than at the close of 1864, and it now has a circulation more than double that of any other paper published in Denbighshire and Flintshire, and is the only medium by which advertisers can fully and effectually communicate with the public generally in those counties. Price 2d., stamped 3d. Published by Bayley and Bradley, Advertiser office, Wrexham.

THE FLINT COUNTY CHRONICLE: A Mining, Agricultural, and General Advertiser for Mold, Flint, Rhyl, Holywell, Northop, Buckley, Hawarden, Saltney, and neighbourhood. The great success which has attended the publication of the "County Chronicle" justifies the proprietors in drawing the attention of advertisers to the special advantages it offers as an advertising medium. For the announcements of auctioneers, public companies, and tradesmen, it is the best in the county, having attained a circulation throughout Flintshire treble that of all the other so-called local papers combined. As a newspaper it contains full and impartial reports of all local events, and devotes particular attention to the mining and oil trade interests of the district—special articles appearing from week to week. All communications should be addressed "To the Editor," Bromfield Villa, Maesdydderwen, Mold.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (Established 1764.) Published every Saturday, price 3d., or quarterly 2s. 2d. THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER. Published every morning, price 1d. Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland.

CHARLES RYLAND AND SONS' WEEKLY REPORT ON THE IRON TRADE.—The "WEEKLY REPORT ON THE IRON TRADE" is a reliable authority on all matters connected with the various trades of the Iron and Mining Districts of North and South Staffordshire, Cleveland District, North and North Wales, and Scotland. The list of subscribers comprises the leading firms in the great centres of industry above referred to. It contains complete, authentic, and unbiased information relative to the various branches of the metallic trades in all parts of the country. Arrangements have been made for illustrating advertisements with block engravings, &c. Subscriptions, payable in advance:—One year, post free, £2 2s.; half-year, post free, £1 1s.; quarter-year, post free, 10s. 6d. Remittances may be made in postage stamps. Advertisements and orders to be addressed—Charles Ryland and Sons, The Mount, Handsworth, Birmingham.

THE STOCKTON AND HARTLEPOOL MERCURY AND MIDDLESBOROUGH NEWS (published at Hartlepool) is eminently the organ of the Coal, Iron, and Iron Shipbuilding Trades in the extensive Mining and Maritime District of South Durham and Cleveland, with which it has been closely identified since its origin. The "Mercury" was for years the only newspaper published in South Durham and Cleveland, and is yet the only one published more than once a week. Advertisements to be forwarded to the publisher, Mr. JOHN H. BELL, Southgate, Hartlepool.

NERVOUS DEBILITY: ITS CAUSE AND CURE.—Before seeking aid from the so-called remedies without medicine, read this valuable work on the Treatment and Cure of Nervous and Physical Debility, Loss of Appetite, Pains in the Back, Spasmodic, &c., with Plain Directions for Perfect Restoration to Health. Sent post free to any address, on receipt of two postage stamps. Letters of enquiry or details of case promptly answered. Address, DR. SMITH, 8, Burton-crescent, London, W.C.

DR. WATSON (of the Lock Hospital), F.R.S., Member of the College of Physicians and Surgeons, on the SELF-CURE OF NERVOUS and PHYSICAL DEBILITY, Loss of Spirits, Loss of Appetite, Timidity, Incapacity for Exertion, &c., with means for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Bedford-square, London. Consultations daily from 11 till 3, and 6 till 8; Sundays, 10 till 1.
Just published, post free for two stamps, **WONDERFUL MEDICAL DISCOVERY**, demonstrating the true causes of Nervous, Mental, and Physical Debility, Loss of Spirits, Indigestion, Want of Energy, Premature Decline, with plain directions for perfect restoration to health and vigour, WITHOUT MEDICINE. Sent free on receipt of two stamps, by W. HILL, Esq., M.A., Berkeley House, South-crescent, Russell-square, London, W.C.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500	Alderley Edge, c. Cheshire*	10 0 0	—	—	8 7 8	0 10 0	Aug. 1886
200	Botallack, t. c. St. Just	91 5 0	—	—	488 15 0	5 0 0	May, 1886
10000	British Slate Company	9 0 0	—	—	9 per cent.	—	Sept. 1886
4000	Brookwood, t. c. St. Just	1 11 0	—	—	0 5 0	0 2 6	Sept. 1886
1000	Bronfod, t. Cardigan*	12 0 0	—	—	8 7 0	0 6 0	Aug. 1886
6400	Cashwell, t. Cumberland*	2 10 0	—	—	0 1 6	0 1 6	Aug. 1886
916	Cargill, s. t. Newlyn	15 5 7	—	—	13 15 0	1 0 0	Feb. 1886
867	Cwm Ertin, t. Cardiganshire*	7 10 0	—	—	21 15 0	1 0 0	Jan. 1887
128	Cwmystwith, t. Cardiganshire	60 0 0	—	—	372 10 0	5 0 0	Dec. 1886
2800	Derwent Mines, s. t. Durham	300 0 0	—	—	167 0 0	5 0 0	Oct. 1886
1024	Devon Gt. Consols, c. Tavistock*	1 0 0	415	410 420	1042 0 0	6 0 0	Nov. 1886
358	Dolcoath, c. t. Camborne	128 17 6	—	—	818 10 0	2 0 0	Dec. 1886
6144	East Caradon, c. St. Cleer	2 14 6	—	—	14 7 6	0 2 0	Jan. 1887
300	East Darren, t. Cardiganshire	32 0 0	—	—	136 10 0	2 0 0	Nov. 1886
128	East Pool, t. c. Pool, Illogan	24 5 0	—	—	390 0 0	2 10 0	Jan. 1887
5000	East Rosewarne, c. t. Gwinnear	2 15 0	—	—	10 6 0	0 1 6	Jan. 1886
1906	East Wheal Lovell, t. Wendron	3 9 0	10 1/2	10 11	2 7 6	0 7 6	May, 1886
2800	Foxdale, t. Isle of Man*	25 0 0	—	—	69 10 0	0 10 0	Jan. 1887
5000	Frank Mills, t. Christow	3 18 6	—	—	3 5 6	0 5 0	Feb. 1886
15000	Great Laxey, t. Isle of Man*	4 0 0	18	16 1/2 17 1/2	5 15 0	0 10 0	Dec. 1886
5908	Great Wheal Vor, t. c. Helston	40 0 0	18 1/2	17 18	10 17 6	0 7 6	Dec. 1886
1024	Herodfoot, t. near Liskeard	8 10 0	35	—	39 0 0	0 10 0	Oct. 1886
6000	Hingston Down, c. t.	5 10 6	—	—	0 10 0	0 5 0	Apr. 1886
400	Lisburne, t. Cardiganshire, Wales	10 15 0	—	—	81 17 6	0 10 0	Nov. 1886
9000	Marke Valley, c. Caradon	4 10 6	—	—	3 11 0	0 2 0	Jan. 1887
3000	Minera Boundary, t. Wrexham*	1 0 0	4 1/2	4 1/2 4 1/2	0 13 0	0 3 0	Mar. 1886
1800	Minera Mining Co. t. Wrexham*	25 0 0	—	—	205 8 0	3 0 0	Nov. 1886
20000	Mining Co. of Ireland, c. t. c.	7 0 0	19 1/2	18 1/2	—	0 7 9	July, 1886
40000	Myndy Iron Ore*	3 5 0	—	—	0 6 6	0 2 6	Mar. 1886
—	New Merrybent and Middleton*	3 10 0	—	—	5 per cent.	—	Nov. 1886
600	Pant-y-Glen, s. t.	20 0 0	—	—	10 per cent.	—	May, 1886
200	Parys Mines, c. Anglesey*	50 0 0	—	—	137 10 0	5 0 0	Jan. 1886
1120	Providence, t. t. t. Llanant	10 6 0	30	30 32	4 3 2	0 1 0	Nov. 1886
512	South Caradon, c. St. Cleer	1 5 0	330	320 330	539 10 0	5 0 0	Nov. 1886
6000	South Darren, t. c.	3 6 6	13 1/2	—	0 5 6	0 2 6	Jan. 1886
6000	Tincroft, c. t. Pool, Illogan	9 0 0	15	14 1/2 15 1/2	18 6 0	0 5 0	Oct. 1886
3000	W. Chiverton, t. Perranzabuloe	10 0 0	57 1/2	59 0	15 7 6	0 2 0	Nov. 1886
400	West Wheal Seton, c. Camborne	47 10 0	130	130 135	464 14 0	2 10 0	Dec. 1886
512	Wheal Bassett, c. Illogan	5 2 6	75	—	622 0 0	1 0 0	Oct. 1886
1024	Wheal Friendship, c. Devon	20 0 0	—	—	300 10 0	0 10 0	Nov. 1886
4295	Wheal Killy, t. St. Agnes	5 4 6	—	—	2 19 0	0 1 0	Dec. 1886
1024	Wheal Mary Ann, t. Menheniot	8 0 0	12	—	60 7 6	0 10 0	Dec. 1886
2040	Wheal Rose, c. St. Agnes	—	10	—	1 0 0	0 10 0	Feb. 1886
396	Wheal Seton, c. t. Camborne	58 10 0	135	125 130	235 15 0	4 0 0	Dec. 1886
1040	Wheal Trelawny, s. t. Liskeard	5 17 0	12	10 1/2 11 1/2	45 5 6	0 8 0	Dec. 1886
17000	Wicklow, c. t. Wicklow	2 10 0	—	—	54 15 0	0 18 0	Oct. 1886

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

1200	Bryn Gwyn, t. Mold*	9 0 0	—	—	3 3 6	0 13 6	Aug. 1885
2880	Clifford Amalgamated, c. Gwent	32 0 0	9 1/2	9 1/2	35 6 0	0 10 0	June, 1885
1053	Cradock Moor, c. St. Cleer	11 12 0	—	—	7 12 0	0 4 0	June, 1885
6000	East Caradon, c. St. Cleer	3 15 0	3 1/2	3 1/2 3 1/2	0 5 0	0 5 0	June, 1885
6000	East Birch Tor and Vitrifer Cons. t.	1 6 6	—	—	0 13 0	0 2 0	Oct. 1885
6000	West Bassett, c. Illogan	1 10 0	1	1 1/4	26 14 0	0 5 0	July, 1885
1024	Wheal Exmouth, t. Christow	—	—	—	—	0 2 6	Oct. 1885

FOREIGN DIVIDEND MINES.

15000	Cape Copper Mining*	7 0 0	9 1/2	9 1/2	2 12 6	0 10 0	April, 1886
21000	East Indian Coal, Calcutta	10 0 0	—	—	—	—	—
20000	Fortuna, t. Spain*	2 0 0	—	1 1/2 2 1/2	1 5 4	0 2 0	Oct. 1886
20000	Gen. Mining Assoc., Nova Scotia	20 0 0	22	20 22	22 9 0	1 0 0	June, 1886
10000	Gonnesa, t. c. [5000 £5 pd., 5000 £4 pd.]	—	—	—	7 1/2 per cent.	—	Yearly
15000	Linares, t. Spain*	3 0 0	1	—	11 6 4	0 5 0	Jan. 1886
50000	Panuco, c. t. c.	3 0 0	3 1/2	2 1/2 3	0 3 2	1 2 6	Dec. 1885
10000	Pontal, c. t. c.	20 0 0	7 1/2	—	0 15 6	0 1 0	July, 1886
100000	Port Phillip, c. t. c.	1 0 0	—	3 1	7 1/2 per cent.	—	Dec. 1886
120000	Scottish Australian Mining Co. t.	1 0 0	—	—	7 1/2 per cent.	—	Dec. 1886
11000	St. John del Rey, Brazil*	15 0 0	53	51 53	73 15 0	4 0 0	Dec. 1886
40000	Victoria (London) [25000 £1 pd., 25000 £2 pd.]	—	—	—	0 9 0	0 1 0	Jan. 1886
10000	West Canada Mining Company*	1 0 0	—	—	0 19 6	0 2 6	May, 1885

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quenagen United, c.	4 10 0	—	—	4 5 0	0 15 0	Nov. 1883
20000	Australian, c. South Australia*	7 7 6	—	—	0 2 0	0 1 0	June, 1885
2464	Burra Burra, c. South Australia	5 0 0	—	40	225 0 0	5 0 0	Dec. 1884
12000	Cobre Copper Company, c. Cuba*	40 10 0	1	—	101 0 0	1 0 0	Jan. 1886
10000	Copago Mining Company, Chile*	16 10 0	—	—	6 18 0	0 10 0	Nov. 1886
100000	Don Pedro No. del Rey, Brazil*	0 14 0	—	198 218	0 9 0	0 1 0	Nov. 1886
10000	English and Australian, c.	1 0 0	—	—	1 12 0	2 0 0	Aug. 1884
68000	Kapunda Mining Co., Australia*	1 0 0	—	—	0 12 0	0 1 0	June, 1884
7927	Lusitania (Portugal)*	3 0 0	—	—	0 17 0	0 3 0	June, 1885
103815	Mariguita and New Granada*	1 0 0	—	—	0 9 6	0 1 6	July, 1885
43174	United Mexican, s. Mexico	23 5 0	2	1 1/2 2	2 19 0	0 5 0	Sept. 1884
10000	Vancouver, c. t.	6 0 0	—	—	0 15 0	0 5 0	Nov. 1884
45000	Yudamutana, c. S. A. t.	3 0 0	1 1/2	1 1/2 1 1/2	0 5 0	0 5 0	Aug. 1883

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos, t. Spain*	2 0 0	1 1/2	1 1/2	—
100000	Anglo-Brazilian, g. t.	0 10 0	—	—	Nov. 1886
40000	Britannia Silver-Lead Mines, France* [15750 lbs. pd.]	—	—	—	Aug. 1886
25000	Capula, s. Mexico*	1 12 0	—	—	—
30000	Chontales, g. s. Nicaragua*	3 0 0	3	2 1/2 2 1/2	Oct. 1886
10000	Copago Smelting, Chile*	10 0 0	—	—	Apr. 1886
300	Copper Mines' Co. of South Australia* [150 £100 pd., 150 £70 pd.]	—	—	—	June, 1886
25000	East India, c. t.	2 15 0	—	—	—
15000	El Chico Silver Mining and Reduction Company*	4 10 0	—	—	Jan. 1886
8000	English and Canadian Mining Company*	5 0 0	—	—	—
50000	Frontino and Bolivia, g. New Granada*	1 12 6	3s.	—	Dec. 1886
10000	Great Northern, c. South Australia*	1 11 6	—	—	—
80000	Great Barrier Land, Mining, &c., New Zealand*	5 0 0	—	—	—
12500	Nerbunda Coal and Iron* [6000 £5 pd., 6500 £4 pd.]	—	—	—	Aug. 1885
50000	Nova Scotia Land and Gold*	1 15 0	—	—	—
15000	Ore, c. New Zealand* [5000 fully paid]	1 10 0	—	—	—
6000	Ped. River Land and Mineral*	100 0 0	—	—	—
50000	Prestera, g. t.	2 0 0	2 1/2	1 7/2 2 1/2	Aug. 1886
17000	Quebrada, c. Venezuela*	10 0 0	—	—	—
10178	Rhenish Consolidated, t. [6000 £5 pd., 4178 £2 10s. pd.]	—	—	—	May, 1886
50000	Rossa Grande, c. Brazil*	0 7 6	—	—	Apr. 1884
15000	San Pedro del Monte, s. Mexico*	4 0 0	—	—	—
10000	San Roque, t. Spain	5 0 0	—	—	—
1000	Schlossberg Colliers*	10 0 0	—	—	—
1000	Tal Antigua, g. t.	0 17 6	—	—	July, 1886
6000	Val Salsam, c. t.	0 17 6	—	—	Jan. 1887
5000	Valgodemard Mining Company*	20 0 0	—	—	—
50000	Vallanazasca, c. Italy*	0 15 0	—	—	—
45000	Victor Emanuel, c. Italy*	1 0 0	—	—	—
20000	Washoe, c.	5 0 0	—	—	—
80000	Worthing, c. South Australia*	1 0 0	—	—	—
75000	Yorke Peninsula, South Australia	1 0 0	—	—	—

BANKS AND FINANCIAL COMPANIES.

Shares.	Banks.	Paid.	Last Pr.	Bus. done.
40000	Alliance*	25 0 0	19	17 1/2 17 1/2
40000	Australian Mort. Land and Finance*	5 0 0	5	5 5 1/2
30000	Australasian*	40 0 0	63	64 1/2 65
10000	Bank of Egypt*	25 0 0	31	30 32
50000	Bank of New Zealand*	10 0 0	18 1/2	17 19
25000	Bank of Otago*	10 0 0	6	6 7
20000	Bank of Victoria, Australia*	32 10 0	80	79 75
8915	Canada Company*	2 10 0	1 1/2	—
50300	Canadian Loan and Investment*	20 0 0	15 1/2	18 19
40000	Chart. Bank India, Aust. & China*	25 0 0	35	32 34
30000	Char. Merc. India, Lond. & China*	10 0 0	16	14 15
50000	City*	25 0 0	36	37 39
20000	Colonial*	3 0 0	3	3 3 1/2
40000	Company of African Merchants*	4 0 0	5	4 5 1/2
150000	Consolidated Bank*	5 0 0	2 1/2	2 1/2 2 1/2
200000	Credit Foncier and Mobilier of England*	5 0 0	4	3 3 1/2
20000	East London*	5 0 0	4	2 1/2 3 1/2
20000	English, Scottish, & Aust. Chart.*	20 0 0	17 1/2	17 18
20000	English and Swedish*	25 0 0	14 1/2	12 14
250000	General Credit and Finance of London*	6 0 0	4 1/2	—
20000	Imperial Bank*	10 0 0	24	25 27
150000	International Financial Society*	5 0 0	2 1/2	2 1/2 2 1/2
300000	International Land Credit*	6 0 0	2 1/2	4 5
4000	London African Trading*	10 0 0	5	—
50000	London Charit. Bank of Australia*	20 0 0	22 1/2	22 25
27500	London and County*	20 0 0	67	67 69
40000	London Financial Association*	25 0 0	9 1/2	6 8
72000	London Joint-Stock*	15 0 0	42	43 45
10000	London and South-Western*	20 0 0	18	17 18
50000	London and Westminster*	20 0 0	94	96 98
50000	Mercantile and Exchange*	12 10 0	—	—
17156	Metropolitan and Provincial*	20 0 0	10 1/2	12
30000	Mineral Rights Association*	1 0 0	—	—
20000	National of Australia*	15 0 0	6	5 6
20000	National of Liverpool*	15 0 0	70	67 69
40000	National*	20 0 0	46	42 44
20000	New South Wales*	25 0 0	60	47 49
40000	Union of Australia*	15 0 0	45	43 45
80000	Union of London*	15 0 0	45	43 45

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4000	Ballacorkish, t. of Man, t. c.	1 10 0	—	—	Oct. 1886
3000	Belladrum, t. c. Taviestock	2 6 0	—	—	—
3200	Bedol Aur. t. Holywell	1 7 0	—	—	Nov. 1886
500	Billins, t. Flint	30 0 0	—	—	—
1000	Blaendyffryn, s. t.	2 0 0	—	—	Mar. 1886
1248	Boscawell, t. c. St. Just	7 6 0	—	—	Dec. 1886
5000	Bottle Hill, t. Plympton	1 14 6	—	3s. 8s.	June, 1886
1000	Camborne Consols, c.	18 10 0	—	—	Feb. 1884